CHANGE SERVICE REQUESTED

July 18, 2008 Volume 30 Number 29 www.processor.com



Arranging Racks

Placement Is Paramount When It Comes To Racks & Other Data Center Equipment

by Christian Perry

YOUR DATA CENTER could boast best-of-breed servers, but if you fail to arrange the servers and supporting equipment in an effective manner, you may as well be using bargain-bin equipment. Today's blades and other high-density devices demand perfect placement to not only optimize performance but also prevent major problems that could lead to outages.

Getting Racks Right

According to Douglas Alger, an IT Architect at Cisco (www.cisco.com) and author of "Build the Best Data Center for Your Business," rack space is no longer a reliable method of judging data center capacity. As servers continue to grow in processing capability and power demand, they're also shrinking in size, leaving data centers to more likely run out of power or cooling than physical space. As such, Alger recommends using monitoring tools that can assess the power and cooling conditions.

"Without them, you might find out the hard way that the half-empty server cabinets in your data center really can't accommodate any more systems because they're out of power or cooling," Alger says. "Once you know the power and cooling capacities of your data center, determine whether you will actually be able to use all of your cabinet



space. If so, great. If not, try to spread things out as much as possible."

When there's more physical "white space" through larger aisles and deeper plenum, there will be less pressure placed on physical infrastructure such as power, cooling, structured cabling, and structural loading, Alger explains.

When it comes to rack orientation, there are plenty of methodologies, but some have stood the test of time (and heat) better than others. John Consoli, vice president of sales at AFCO Systems (www .afcosystems.com), says that the ideal orientation for all data center racks is *Go to Page 10*

Data Center Power Efficiency

New Standards Help You Assess Your SME's Energy Use

by Curt Harler

At the Olympic Games, athletes strive to go higher, faster, and stronger than the competition. If there were a data center Olympics, the gold medal would go to the small to midsized enterprise that was most

power-efficient. Just as Olympians compete against standard benchmarks, so, too, data centers are measured against standard metrics. Several measurements are being developed to help data centers assess their power efficiency. Three leading metrics are PUE (power usage effectiveness), DCiE

Several measurements are being developed to help data centers assess their power efficiency.

(data center infrastructure efficiency), and CD Pro (which the Department of Energy is developing).

"These are just a way of determining the total power used by the facility and are methods of determining the power actually used by the IT equipment," says Mike Stout, vice president of engineering at Falcon Electric (www.falconups.com).

The Leading Metrics

The three contenders all seek to get data center managers thinking about and measuring the same thing: how efficiently the data center consumes power. PUE and DCiE are mathematical and simply different ways of expressing the same thingsomewhat like saying, "I have three times as many marbles as you do" vs. "You have one-third as many marbles as I do." The formula for PUE is Total Facility Power divided by IT Equipment Power: PUE = (Total Facility Power/IT Equipment Power). DCiE is its reciprocal, or PUE divided by 1. It is defined as: (1/PUE) or (IT Equipment Power/Total Facility Power) x 100%.

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COVER FOCUS

Data Center 101

What are the most important items you need to know related to key areas of working in a data center? We talked with industry experts to find out.

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TECH & TRENDS

Checking Data Center Power Efficiency | 1

Several measurements are being developed to help data centers assess their power efficiency. Three leading metrics are PUE (power usage effectiveness), DCiE (data center infrastructure efficiency), and CD Pro.

DR Testing: What To Do & When | 23

Even the most stellar disaster recovery plan is not worth much if it is not regularly tested.

Improving Web Security | 24

Even when an industrious IT manager covers all the security bases, there is one pesky problem: Users within any organization can fall prey to a Web attack, typically one that bypasses a firewall and worms its way onto file servers.

Supporting Remote Workers | 25

Embracing full-time telework requires careful planning of technology infrastructure, HR policies, and IT support processes to ensure a successful implementation.

Product Releases | 17

■ 3PAR announced the 3PAR InForm Management Console, which is designed to enhance 3PAR InServ Storage Server visibility, control, and management.

CounterPath announced Quick Conference, a SIP-based audio conferencing solution that allows businesses to manage their own in-house conferencing services. **Digital Data Destruction Services** released D3eraSE, a new Tier 4 electronic data destruction service that permanently erases all data stored to a client's hard drives and/or flash media. **E Kendall Howard** launched its Anti-Theft PC Security Stand, which it says is the industry's most advanced method for preventing PC hardware theft and damage. ■ Rackspace Hosting released Rackspace PCI Toolbox, a suite of hardware, software, and professional services aimed at helping companies meet compliance standards.

StoneFly released StoneFusion 6.1, a new update of StoneFly's intelligent network storage platform. ■ Zmanda unveiled Amanda Enterprise with extended application support and disaster recovery options for Windows databases and applications.

EACH WEEK

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For address change, fill out form below with new **Subscribe Today/Address Change Form** PLEASE PRINT Phone: (_ __)_____Fax: (______)____ Contact Name: Company Name: ___ Address: ___ State: _____ Postal Code: ____ ____ Web Address: __ Email: 1. What is the size of your company 3. What is your annual computer hardware/ software purchasing budget? (how many employees)? □ 200 to 499 □ \$0 to \$9,999 \$100,000 to \$249,999 ☐ Less than 10 □ \$10,000 to \$24,999 □ \$250,000 to \$499,999 □ 10 to 99 □ 500 to 999 □ 100 to 199 □ 1,000+ □ \$500,000 to \$999,000 □ \$25,000 to \$49,999 □ \$50,000 to \$99,999 \$1,000,000+ 2. How often do you purchase computer hardware/software?

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Messaging & Telephony

JULY 18, 2008

Messaging & Telephony

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Complete Email & Collaboration Server

PostPath Ensures Ongoing Service In The Event Of A Failure



PostPath Server High Availability Edition v2 is a drop-in alternative to Microsoft Exchange.

POSTPATH SERVER HIGH Availability Edition v2 is a complete email and collaboration server that is a drop-in alternative to Microsoft Exchange and incorporates multiple measures to ensure ongoing service in the event of a failure in the underlying hardware or network systems. It consists of a multiserver bundle with one or more instances of the primary PostPath Server that act as the mailbox email server(s) during normal operation, plus a redundant server to take over in case of primary server failure.

The PostPath Server uses a "continually consistent" file-based data store. By exploiting the performance and capabilities of native server file systems, PostPath

Server enables the use of the open and standards-based high-availability tools leveraged in PostPath Server High Availability Edition v2, simplifying the implementation and management of email services.

New features to version 2 expand the number and types of high availability configurations supported. These include the choice of shared or replicated storage configurations, on or offsite redundancy configurations, synchronous or asynchronous replication configurations, virtual HA support, the ability to configure hot or cold failover, and support for Web mail and mobile devices.

PostPath Server High Availability Edition v2 is the latest addition to the PostPath Server family, a line of email servers that are network-protocol interoperable with the Exchange ecosystem.

PostPath Server High Availability Edition v2

Starts at \$4,000 for 60 users, including native Outlook, ActiveSync, BlackBerry support, and redundant server

Email and collaboration server that can serve as a replacement or supplement to Microsoft Exchange

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3CX Phone System includes a Web-based interface for configuration and presence status notification.

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3CX Phone System for Windows is a software-based IP-PBX that replaces a proprietary hardware PBX. It supports most SIP phones, VoIP gateways, VoIP service providers, and PSTN phone lines. It is easy to manage as it integrates well with Windows network infrastructure.

The advanced phone system supports call switching, routing, and queuing; scalability to unlimited extensions and phone lines; easy management with Web-based configuration and presence status indication; unified messaging; auto attendant; and configurations for many VoIP providers. The new version also ships with call conference rooms, Windows 2008 support, paging/intercom, and other features.

3CX Phone System comes in four editions, all supporting an unlimited

number of extensions. The Free edition can handle eight simultaneous calls; the Small Business edition supports up to eight; the Pro up to 16; and the Enterprise up to 32. Commercial editions have an extensive feature set, and call capacity can be expanded with upgrade packs.

3CX Phone System Version 6.0

Free edition available; Small Business Edition starts at \$595

Software-based IP-PBX phone system with call switching, routing, queuing, and many other features

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SECURITY JULY 18, 2008

Protect Online Apps

Imperva SecureSphere Web Application Firewall Helps Businesses Protect & Monitor Sensitive Data



WEB APPLICATION ATTACKS can produce devastating results ranging from high-profile data breaches to brand damage, lawsuits, and fines.

The Imperva SecureSphere Web Application Firewall is an accurate, effective Web application firewall. The SecureSphere WAF protects online applications against sophisticated application-level attacks such as SQL injection and cross-site scripting, prevents theft and leakage of data from online applications, and meets the PCI DSS (Payment Card Industry Data Security Standard) section 6.6 application security requirement.

The SecureSphere Web Application Firewall helps businesses better protect and monitor their applications and sensitive data. Imperva's Dynamic Profiling technology automatically builds a model of legitimate behavior and adapts to application changes over time, keeping SecureSphere's application defense up

to date and accurate without manual configuration or tuning.

Deployed in minutes with no changes to the existing infrastructure, SecureSphere protects and monitors the complete application stack from the individual application to the server and network. Imperva's Transparent Inspection technology delivers multigigabit performance, submillisecond latency, and options for high availability that meet the most demanding data center requirements. For large-scale deployments, the SecureSphere MX Management Server centralizes and streamlines configuration, monitoring, and reporting.

The SecureSphere Web Application Firewall leverages multiple inspection layers and security defenses to provide the highest level of protection.

Imperva SecureSphere Web Application Firewall

Starts at \$17,500

Protects online applications against sophisticated attacks such as SQL injections

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OUT TO LUNCH

- THE SERVER

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NETWORKING & VPN

July 18, 2008

Super Network Management

Entuity's EYE Can Increase Effectiveness & Productivity



At a glance, IT staff can view the status of the network from the Eye of the Storm dashboards.

To drive profitability, today's networks must offer configurations and architecture that support a broad range of initiatives for business service management and service delivery. Entuity's Eye of the Storm (EYE) is a network management tool that dispenses the information IT operations personnel need to sustain real-time business imperatives, optimize the capacity and performance of network resources, and support the variety of operating systems within an organization. The newest release, EYE 2008 Service Pack 2, adds a number of features.

EYE 2008 SP2 includes support for current heterogeneous devices, including the Cisco SSL Proxy module and client

support on Windows Vista. To help network managers and architects visualize and author network topology in a geographical content, the new EYE software suite includes an EYE Connectivity Viewer to add background images and export maps in Microsoft's Visio format. The new features let IT staff superimpose network models or troubleshooting diagrams over maps or schematics.

EYE 2008 SP2 also features expanded router protocol awareness that lets EYE automatically discover HSRP-active routers and their peers, collect performance data, present reports, and deliver alerts on operational anomalies and thresholds. The real-time reports and alerts let IT staff proactively optimize the operation of high-availability networks. With scriptable device renaming, EYE 2008 SP2 helps automate workflows to fit the strategies of network admins and power users.

Entuity Eye of the Storm

Starts at \$50,000; current customers get SP2 free

Helps IT staff increase productivity by automating processes for business service management

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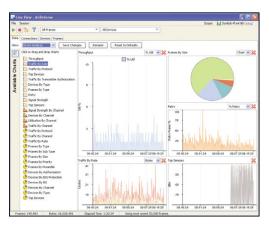
www.entuity.com



NETWORKING & VPN

Protect Against Wireless Threats

AirDefense Enterprise With Live View Offers Administrators A Real-Time View Of Network Activity



Live View uses charts and graphs to show network activity.

SECURITY IS ONE OF the most important issues facing any company. As a wireless intrusion prevention system, AirDefense Enterprise provides protection against wireless threats; monitors for policy compliance, performance, and troubleshooting; and features location tracking. Enterprise combines with wireless VPNs, encryption, and authentication systems for protection against wireless threats and unauthorized devices.

Live View is the newest addition to Enterprise. It provides IT admins a realtime view of wireless network activity. With immediate access to network information, administrators can quickly troubleshoot problems. With a configurable dashboard, device connectivity mapping, and frame capture/ analysis, Live View can help locate and solve network issues and then verify a problem has been resolved.

With Live View, technicians can view issues remotely and correct them, without needing to visit remote locations to solve problems.

AirDefense Enterprise features accurate and comprehensive detection of threats and attacks against network systems. It minimizes legal and financial liabilities because it

complies with regulatory standards. And, with the mobile workforce protection feature, mobile workers can rest assured they are secure when traveling.

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MarketPlace -



NEWS



Securities Fraud Lawsuit Filed Against Apple

APPLE AND ITS CEO Steve Jobs, former CFO Fred Anderson, former counsel Nancy Heinen, and several board members are the subjects of a lawsuit relating to the backdating of stock options. The lawsuit, which Martin Vogel and Kenneth Mahoney filed in the U.S. District Court in San Jose, Calif., claims the current and former Apple employees intentionally filed false documents to conceal stock option grants given to executives. "The defendants knew that options were not granted on the dates that were disclosed to shareholders," according to the lawsuit.

CXtec Lays Off 45 In Company Reorganization

FOR THE FIRST TIME in its 30-year history, CXtec, based in Syracuse, N.Y., laid off 45 employees, or about 12% of its workforce. 42 of the 45 employees laid off are from the networking solutions provider's headquarters, and three are from its office in Buffalo, N.Y., which is slated to close. The cuts come as the networking solutions provider is reorganizing the company, including splitting its Cisco Systems business into a separate unit as part of a strategy to enable CXtec to improve its relationship with Cisco and better serve its Cisco customers. The company is still working out details of its reorganization.

VMware Replaces CEO

VMWARE PRESIDENT and CEO Diane Greene has left the company and will be replaced by former Microsoft executive Paul Maritz. VMware did not give any specific reasons for Greene's departure. In a statement, Joe Tucci, chairman of VMware's Board of Directors, credited Greene for guiding "the creation and development of a company that is changing the way that people think about computing." Tucci went on to say that VMware is "in a tremendous position to extend its lead in the virtualization market." While at Microsoft, Maritz was responsible for the development and marketing of several major products, including Windows 95 and Windows NT.

New Jersey Man Pleads Guilty To Defrauding Cisco

A FORMER INDEPENDENT contractor for the city of Newark, N.J., has admitted to charges he defrauded Cisco out of millions of dollars in equipment. Between January 2003 and March 2007, Michael Kyereme, who also goes by the name Michael Appiahkyeremeh, received about \$7 million in Cisco replacement parts for the city of Newark. He then resold those parts to third parties, primarily in California. Under contract from Cisco, after receiving the replacement parts, Kyereme was to have returned the faulty parts to Cisco within 10 days. On a number of occasions, he reportedly ordered expensive replacements parts and returned lessexpensive pieces of equipment.

RIM Gets Stay In Patent Trial

A TEXAS JUDGE has delayed the trial scheduled for Visto's patent-infringement accusations against BlackBerry maker Research In Motion, pending re-examination of Visto's patent claims by the U.S. Patent and Trademark Office. Visto sued Research In Motion in 2006, claiming the BlackBerry system infringed on Visto patents. As a result, Research In Motion requested that the validity of patents be re-examined. When granting the stay, the judge said Research In Motion cannot ask for additional re-examinations or, during the trial, challenge the validity of the patents with evidence already examined by the patent office.

Webroot Names New CFO

FREDERICK BALL will take over the position of chief financial officer at Webroot, the security software provider announced. He will be responsible for helping to propel Webroot's strategic growth initiatives and overseeing its financial procedures. Ball has more than 20 years of leadership experience, including senior roles at Borland Software, KLA-Tencor, and PriceWaterhouseCoopers. Prior to this position, Ball served as chief financial officer at BigBand Networks, and before that, he was chief operating officer of CallTrex. He is also the chairman of the audit committee for the Electro-Scientific Industries Board of Directors.

■ Senate OKs Surveillance Program

THE U.S. SENATE voted 69-28 to approve the FISA (Foreign Intelligence Surveillance Act) Amendments Act. The surveillance program, which the National Security Agency operates, targets the communications, primarily phone calls and email, of suspected terrorists and offers legal immunity to telecommunications companies that help the U.S. government gather information. The surveillance program began in 2001 and, if President George W. Bush signs it, could be extended until the end of 2012. Proponents of the legislation say it's critical to our nation's security, while opponents say that telecommunications companies and the administration could

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	July 3 \$	July 11 \$	% change from previous week
Computer Associates	CA	\$25.61	\$22.28	\$22.15	▼ 0.58%
Cisco Systems	CSCO	\$28.76	\$23.12	\$21.82	▼ 5.62%
Dell	DELL	\$28.37	\$22.81	\$22.31	▼ 2.19%
Electronic Data Systems	EDS	\$28.10	\$24.70	\$24.66	▼ 0.16%
Google	GOOG	\$544.47	\$537	\$533.80	▼ 0.6%
HP	HPQ	\$45.65	\$43.44	\$41.59	▼ 4.26%
IBM	IBM	\$109.10	\$119.54	\$122.12	▲ 2.16%
Intel	INTC	\$24.57	\$20.66	\$20.64	▼ 0.1%
McAfee	MFE	\$35.55	\$33.47	\$33.07	▼ 1.2%
Microsoft	MSFT	\$29.49	\$25.98	\$25.25	▼ 2.81%
Oracle	ORCL	\$19.98	\$20.73	\$20.96	▲ 1.11%
Red Hat Software	RHT	\$21.26	\$21.04	\$19.72	▼ 6.27%
Sun Microsystems	JAVA	\$5.38	\$10.63	\$9.11	▼ 14.3%
Symantec	SYMC	\$19.53	\$19.12	\$18.82	▼ 1.57%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions

potentially use the immunity exemptions to conduct illegal activity.

Firefox Sets Browser Share Record

Mozilla's Firefox Web browser topped 19% market share last month and is on path to be more than 20% this month, according to figures from Net Applications. Internet Explorer still held a significant lead in Web browser share, with 73.01% of the market; however, that number is down 0.7% from the previous month. Firefox's 19.03% share was up 0.6% from May. Apple's Safari had 6.31% market share, up 0.06%. In the first hour Firefox 3.0 was available, it gained 1% worldwide market share, according to Net Applications. Overall Firefox usage increased about 0.4%, but most of Firefox's gains came from existing Firefox users switching to version 3.0, according to the research firm.

Microsoft Confirms Zero-Day Exploits

IN A SECURITY ADVISORY, the Microsoft Security Response Center verified that attackers were exploiting an unpatched vulnerability in its Word 2002 program. The announcement came shortly after the software giant had fixed nine bugs in its software programs. Although Microsoft did not provide many details about the zero-day exploits, it did say that other versions of Word, such as Word 2000/2003/2007 for Windows and Word 2004/2008 for Mac, were not affected. The response center recommended Word 2002 users open and view Word 2002 files using Word 2003 Viewer; it said a patch may be on the way but did not specify when.

Firms Losing Interest In Green IT

ACCORDING TO the 3,000 customers that hosting provider Rackspace surveyed, companies are less willing to make sacrifices to help the environment this year than they were a year ago. In fact, 11% said they are not at all concerned about their company's environmental impact and doubt they ever will be. 63% said they are unwilling to sacrifice server performance to reduce carbon emissions, up from the 41% who said that last year. Last year's survey showed 8% of customers were unwilling to pay a premium for environmentally friendly products and services, while 30% of this year's respondents say they wouldn't pay that green premium.

More Businesses Using Macs

ABOUT 80% OF businesses now have at least one Mac system in-house, according to recent research by Yankee Group. That figure is up significantly from the 47% of businesses that reported using Apple systems when the same study was done two years ago. In addition, 21% of firms have more than 50 Macs installed at their businesses. Survey respondents cited the Mac's ability to virtualize other operating systems and the reliability of Apple hardware as two factors for the increased use of Macs.

Microsoft To Help Small Businesses **Move To Vista**

SMALL BUSINESSES that purchase new PCs installed with Windows Vista will get help from Microsoft in making the move and adjusting. Microsoft will offer free telephone technical support to businesses with fewer than 50 employees or 25 PCs. To qualify for the program, called Windows Vista Small Business Assurance, businesses must purchase new PCs with either Vista Business or Ultimate by Sept. 30. The free support will end Oct. 31. The support will include answering questions about Vista, helping with compatibility problems, and educating callers about Vista features.

Upcoming IT Events

- JULY -

SANSFIRE 2008

July 22-31 Washington, D.C. www.sans.org

. **ISSA Baltimore** July 23, 4:30 p.m.

Sparta Inc. 7110 Samuel Morse Drive Suite 200 Columbia, Md.

www.issa-balt.org

National Institute

of Governmental Purchasing July 26-30 Charlotte, N.C www.nigp.org/Events /Forum.htm

AFCOM Michigan

July 28, 9 a.m. Kellogg Hotel & Conference Center Michigan State University 55 S. Harrison Road East Lansing, Mich. www.afcom.com

- AUGUST -

LinuxWorld

Conference & Expo August 4-7 San Francisco, Calif. www.linuxworldexpo.com

AFCOM DFW

August 5, 2 p.m. Anixter 1601 Waters Ridge Road Lewisville, Texas

www.afcom.com CompTIA Breakaway Conference

August 5-7 Orlando, Fla. breakaway.comptia.org

Next Generation

Data Center August 4-7 San Francisco, Calif.

www.ngdcexpo.com

AFCOM Central Texas

August 7, 11:30 a.m. Marie Callender's Restaurant 9503 Research Blvd. Austin. Texas **SHARE**

August 10-15

San Jose, Calif. www.share.org

AITP Nashville

August 14, 5:30 p.m. Holiday Inn-Brentwood 760 Old Hickory Road Brentwood, Tenn. www.aitpnashville.org

AITP Washington, D.C.

August 14, 6:30 p.m. Alfio's Restaurant 4515 Willard Ave Chevy Chase, Md. aitpwashdc.ning.com

Intel Developer Forum

August 19-21 San Francisco, Calif. www.intel.com/idf

ISSA Forth Worth

August 20, 11:30 a.m. The City of Fort Worth Building 275 W. 13th Street Fort Worth, Texas www.issa-cowtown.org

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PRODUCTS AT WORK

Take Note

Nuance's Dragon NaturallySpeaking Eases A Florida Agency's Workload

by Robyn Weisman

LIKE MOST SOCIAL services agencies, the Florida Department of Children and Families (www.state.fl.us/cf_web) has to do a lot with limited resources. Its 2,000 protective investigators statewide handle child protective cases, dealing mostly with abuse and neglect and adult protective cases, which deal with maltreatment and exploitation as well as elder abuse and other cases of neglect.

According to FDCF press secretary Sarrah Troncoso, child protective investigators handle an average of 14.3 cases, while adult protective investigators handle an average of 18.7 cases. Meanwhile, FDCF CIO Chris Pantaleone says that investigators were spending 40 to 45% of their time performing dictation, data entry, and other administrative tasks for these ever-increasing caseloads.

"The caseloads for these protective investigators are continually increasing, so we're always trying to find efficiencies," Pantaleone says. "Cost is always a major factor with shrinking budgets."

To save time, a pocket of investigators started using Nuance's Dragon Naturally-Speaking (781/565-5000; www.nuance.com). Someone in a local branch, either IT or staff, found a copy at a local retail outlet and decided to try it out, Pantaleone says,

and dictate her case notes, which would then get emailed back to her. When she moved over to the adult side, however, she had no transcription service of any kind to help her with her work.

"Most of [our notes] are hand-written because a lot of people don't like tape recorders [because] they worry, 'Will it be used against me?" Johnson says. "If you're writing five pages of notes, you know that [it] is going to take you an hour or so because . . . you're still working in between phones ringing, and so something that should've taken you a half an hour is now taking you an hour and a half."

The FDCF started looking into software solutions because transcription services were becoming too cost-prohibitive. According to Pantaleone, the agency tried out a couple of different software packages to evaluate them on the basis of cost, ease of use, and customer service and decided that Dragon NaturallySpeaking was the best fit.

Navigating The Learning Curve

When asked if she wanted to try out Dragon NaturallySpeaking as part of the pilot program, Johnson responded, "Hey, I'll try out anything that [is] going to make my life and work easier to do."

Out of the Florida Department of Children and Families' 2,000 investigators statewide, 75% of them said they would use Dragon NaturallySpeaking if it were provided to them.

and these guinea pigs had such a good experience with Dragon NaturallySpeaking that the agency decided to incorporate the software into all of its investigators' workflows

Making Work Easier

When FDCF adult protective investigator Rosemary Johnson worked on the child protective investigator side of the FDCF, she had access to a service called Cyber-Secretaries (now SpeakWrite; www.speakwrite.com), which allowed her to call in Johnson has already benefited from using Dragon NaturallySpeaking. She covers three different counties and is constantly in her car driving long distances. Sometimes she can't get back to her office for two or three days. But with Dragon Naturally-Speaking, Johnson can record her notes either into a headset connected to a laptop or into a special digital recorder so that they can be uploaded to her computer once she's back in the office.

Johnson says there has been a learning curve both for her and the software. "The

more you talk and work with it, the better it's going to get, but initially you get into the [situation] where you'll say something, and it will put something totally different," she says. "That's kind of tough when you're working and trying to get everything done. I think it's going to be even better as [I] get to be more familiar with it and work with it."

Johnson also noticed that she was getting more errors using the digital recorder that was provided to her; however, she says the agency will be sending her upgraded digital



recorders shortly, which should take care of that issue.

The Best Choice

Johnson's experience echoes other protective investigators throughout the state, says Pantaleone. "After a visit, they may sit in their cars, take care of paperwork, and dictate into the digital voice recorder," says Pantaleone. "When they get back to the office, they would be able to plug into [a] desktop or laptop and activate Dragon NaturallySpeaking, and it would handle the conversion, go through [a] proofing session to make sure it completely converted everything fine, and make those corrections and then put that in the core software."

Pantaleone says that Johnson and several other case workers found using Dragon NaturallySpeaking to be an extremely positive experience. Moreover, out of its 2,000 investigators statewide, 75% of them said they would use Dragon NaturallySpeaking's technology if it were provided to them. As a result, the FDCF decided to purchase 1,600 licenses for Dragon NaturallySpeaking from Nuance.

Experience With Nuance

Pantaleone praises the FDCF's experience with the people at Nuance, saying that everyone involved went above and beyond his agency's expectations. "When they came to Tallahassee for a product demonstration, it was like seeing old friends," Pantaleone says. "They were all very personable, easy to talk to, listened to what our

needs were, and explained how [their product] would benefit FDCF."

Pantaleone reserves special praise for Tom D'Errico, federal sales manager at Nuance, who has acted as the agency's primary contact. According to Pantaleone, D'Errico was instrumental in the procurement of Dragon NaturallySpeaking, as well as the digital voice recorders needed to use the application.

"Given current funding restraints on the State of Florida, I am not sure this could have been pulled off had it not been for

D'Errico's assistance working with Nuance to get the price discounts afforded to us," says Pantaleone. In addition, D'Errico always made himself available for any conference calls to answer any questions that came up and was also very good at following up to make sure the FDCF had everything it needed when it was needed.

For his part, Peter Mahoney, prod-

uct manager of Dragon Naturally-Speaking at Nuance, says he has found that the issues an agency such as the FDCF faces are similar to those faced by most organizations that turn to Dragon NaturallySpeaking. They have a backlog of work that is either diverting professionals from more important tasks at hand or forcing organizations to pay overtime in order to get caught up.

But Dragon NaturallySpeaking offers additional benefits that users don't initially expect. "With additional detail they often capture, [users] much more quickly expand on notes and obtain a more accurate, richer view of what happened," says Mahoney.

Nuance Dragon NaturallySpeaking

Easy-to-use voice recognition software solution that enables users to dictate text either directly into a PC or via a digital voice recorder

"I can be out in the field sometimes for an hour or two [having] to sit and wait to be able to find clients, and with [Dragon NaturallySpeaking], you can be doing some of [your work] and have it already done in your system. It's just been a tremendous help," says Rosemary Johnson, an adult protective investigator for the Florida Department of Children and Families (www.state.fl.us /cf_web).

www.nuance.com (781) 565-5000

SECURITY JULY 18, 2008

High-Performance Security

WIN Enterprises' PL-60760 Series Secures A Variety Of Networking Applications

EFFICIENT AND EFFECTIVE networking of devices, offices, and employees is vital to the success of any business, but it must also be secure. Getting a host of secure networking options in one package goes a long way toward that goal. The PL-60760 series of network security appliances from WIN Enterprises sports a bevy of features all packed into a 1U rackmount form factor.



The PL-60760 platform is ready-made to be deployed for applications such as IDS/IPS, firewalls, VPN gateways, NACs, and UTM (unified threat management). The time-to-market is designed to be as short as possible, so OEMs can put the appliance to use quickly.

Features of the PL-60760 appliance include four GbE ports with optional bypass options; four 10/100 Ethernet LAN ports; and a port each for USB, RS-232, and Mini PCI. System memory can be configured up to 4GB via DDR2 sockets. The device also has two PCI-X slots, a 16x2 LCM display, a four-button keypad, and an easily removable cover. The PL-60760 also sports one E-ATA and two SATA connectors and CompactFlash types I and II and operates on the Intel Socket 479 Core 2 Duo/Core Duo processor with the Intel 3100 chipset.

Supported operating systems for the PL-60760 include Windows 2003/XP/XP Pro/Vista as well as Linux distributions including Fedora/8, Redhat Enterprise Linux 5, and Cent OS 5.

Available configurations include the PL-60760A and PL-60760B. The former has four GbE Copper interfaces, while the latter has four SFP ports. There is also a control board version, the MB-60760, which also has four GbE and 10/100 LAN ports.

They can be customized to specifications and feature customer-specific bezel designs.

WIN Enterprises PL-60760

PL-6076A: \$617; PL-6076B: \$766

A network security appliance with short time-to-market that can be customized for OEMs

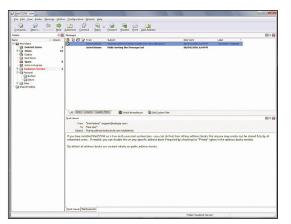
(978) 688-2000

www.win-enterprises.com



Handle Multiple Users & Email Addresses

InterVations' MailCOPA Email Software Simplifies Email



InterVations MailCOPA updates all shared email users in real time, displaying critical message information.

CHECKING VARIOUS EMAIL addresses of co-workers or looking through your own accounts can often be a time-consuming burden. InterVations MailCOPA v. 9 is a multiuser email program for Windows that can help you manage multiple email addresses. If you have a team of employees using multiple email addresses on multiple computers, MailCOPA ensures that all emails are secure, stored centrally, and available immediately to the people who need to access them.

MailCOPA can bring together each employee's emails from multiple accounts and make it easy to share emails across the network. MailCOPA lets a team of employees answer messages without the risk of emails being answered multiple times by different workers. MailCOPA updates all shared email users in real time, displaying information about which messages have been opened or replied to. The program provides a simple, efficient way to manage help desk tickets, technical support requests, and any information stream from clients and prospects.

The interface is customizable, and you can create macros and templates to personalize corre-

spondence. Messages can be threaded for easy viewing or locked to ensure they won't be deleted.

InterVations MailCOPA

Starts at \$39.95 for a five-user, single machine license; 30-day trial version available

Manages multiple email addresses, ensuring emails are secure and centrally stored

(508) 833-1660



Monitor Infrastructure Intelligence

Get The Most Out Of Your Applications With Integrien Health Check



Integrien's Health Check service provides a summary of transactions, trading, and tier cross-section performance.

TO EFFECTIVELY MONITOR the progress of applications and services, enterprises must determine where internal issues originate. Integrien offers a new systems management service for this purpose: Integrien Health Check.

Health Check uses the data center operations solution Integrien Alive to access historical data and analyze business performance. Companies are first required to provide 60 to 90 days of past infrastructure data. As Health Check deciphers the causes of brownouts and outages, it captures models of problematic behavior so companies can identify recurring bad patterns. Through Health Check's insight

into the "heartbeat" of a specific application, users can observe how applications are performing based on static threshold results.

To understand the association between business performance, user experience, and IT communications, Health Check employs an advanced correlation method to develop a PMDB (Performance Management Database). A PMDB analysis includes the following reports: application behavioral analysis report, "top influencers" report,

and a root cause forensics report. This database can supply crucial information regarding the interrelation of infrastructure components, enterprise operations, and user practices.

Integrien Health Check

Application service that pinpoints IT performance problems

\$35,000

(949) 788-0555 x 2200

www.integrien.com



INTEGRIEN POWERING PREDICTIVE IT

STORAGE JULY 11, 2008

Multiplatform Migration

Ease Migration Pains With PlateSpin's PowerConvert Version 7.0

EFFICIENCY IS KEY in any data center, but it can be difficult to achieve when you need to move and rebalance workloads among different types of environments and platforms, a need PlateSpin addresses with PowerConvert Version 7.0.

PowerConvert Version 7.0 is designed to operate in a heterogeneous environment to simplify the management of server workloads. Version 7.0 increases support for Red

Hat Enterprise Linux, 64-bit Windows Server, and Citrix XenServer environments, as well as

image-based disaster recovery capabilities and improvements to migration speed for large-scale deployments.

Support for Linux migrations includes P2P (physical-to-physical) and V2P (virtu-

al-to-physical) capabilities. P2V (physical-to-virtual) is supported for 64-bit Windows environments, and Citrix support includes

X2P (anywhere-to-virtual) and V2I (virtual-to-image). PowerConvert's incremental imaging enables users to import and export images from a repository of server workloads, improving backup and disaster recovery and reducing costs.

With a drag-and-drop interface, users can remotely decouple workloads from a server and stream

them to another host, physical or virtual. In essence, PowerConvert is designed to enable users to maintain service-level requirements by optimizing and relocating workloads quickly.

Also new is improved transfer speed for workload migrations partially courtesy of Server Sync, which offers testing capabilities that can be done over a variety of network types to reduce downtime and maximize migration integrity.

PlateSpin PowerConvert Version 7.0

Per-use license (one-time license): \$175 Per-workload license (perpetual use): \$425

Provides support for migrations across a variety of different environments and platforms

(877) 528 3774



STORAGE
JULY 4, 2008

Manage Archived Data

Navigate Your Information Stores With B&L's Archived Data Manager



THE ABILITY TO effortlessly search for a single piece of information amid a sea of data is a dream come true for many organizations. With simple organization in mind, B&L Associates has created ADM (Archived Data Manager), a Web-based application that combines historical backup catalogs and organizes them for easy access and management of offline archived data.

Using B&L's patent-pending data extraction technology, ADM can quickly load a server's backup catalog from popular tape backup solutions, including Symantec's Veritas NetBackup, EMC's Legato NetWorker, CA's ARCserve, and HP's Omniback II and Data Protector. ADM features a simple view of a company's backup catalog information and an easy method of searching files by backup

application, backup sever, backup client file name, date/time, and expiration date.

B&L highlights ADM's compliance with the amendments to the Federal Rules of Civil Procedure regarding historical backup data. ADM's file-level search makes file discovery quick and easy, which reduces the amount of tapes sent out for content indexing. In accordance with other state and federal laws, ADM features alerts to archived files that are ready for expiration, letting organizations quickly reduce their historical data and avoid related liabilities.

ADM features vast accessibility; once Archived Data Manager has been installed on one computer, it can be accessed from any computer with an Internet connection, making enterprisewide use possible. Other features include rapid data extraction, enabling ADM to load a server's backup catalog into the ADM database without interrupting normal business procedures.

B&L Archived Data Manager

Provides a single view of backup catalog information and an easy way to organize and search for files

(800) 652-2635

www.bandl.com



Messaging & Telephony

SECURITY July 4, 2008

Restore Access To EFS-Encrypted Files

Advanced EFS Data Recovery Decrypts Protected Files

MICROSOFT ENCRYPTING File System (EFS) is an integral part of Microsoft Windows operating systems that enables users to protect their files against unauthorized access.

The EFS appears transparent to the user, providing on-the-fly encryption and decryption of data with strong cryptographic algorithms.

The ease of use and transparency to the end user creates a false impression of impeccability of the Encrypting File System in the eyes of users, who often forget about the encrypted files when they reinstall Windows or transfer a disk into a new, upgraded computer.

Elcomsoft Advanced EFS Data Recovery decrypts the protected files and works in all versions of Windows 2000, XP, 2003, Vista, and Windows Server 2008. The recovery is still possible even when the system damaged or can't be booted, or when some encryption keys have been tampered with.

Advanced EFS Data Recovery quickly and efficiently decrypts files protected with EFS. Scanning the hard disk directly sector by sector, the program locates the encrypted files as well as the

available encryption keys and decrypts the protected files. The direct access to the file system allows Advanced EFS Data Recovery to recover encrypted files in the most difficult cases, even if the disk with data is only available without a valid user account to log in into system or other simi-

lar scenarios.

With Advanced EFS Data Recovery, instant access to EFS-protected files is often possible. Supplying a valid password to the user account (or a previously used password) or an account that serves as a data recovery agent (Administrator account by default) can

often provide on-the-fly decryption of

Elcomsoft Advanced EFS Data Recovery

the protected files.

Standard \$149; Professional \$299

Restores access to EFS-encrypted files

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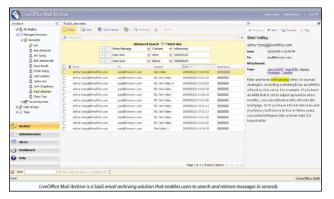
efs.elcomsoft.com



Convenient Mailbox

Management

Email Archiving For Enterprises Of Any Size



IT and HR can conduct an advanced Mail Archive search of user accounts by message, date, and content.

REGARDLESS OF A business' size, forward-moving organizations must respond to the increasing volume of emails filling user inboxes. Email archiving is a necessity for maintaining an efficient exchange of information, but this can become a challenge when IT resources are limited.

LiveOffice Mail Archive offers an archiving, compliance, and e-discovery solution for customers who want to minimize storage costs yet protect their organization at the same time. This SaaS platform uses Web 2.0 along with cloud computing to execute quick search and retrieval.

Through full compliance, LiveOffice Mail Archive enables companies to cen-

tralize and search the email repository, as well as identify user misconduct within individual messages. Unlimited mailbox storage gives users the ability to view and recover both archived messages and attachments. Discovery provides rapid search response and communication protection.

JULY 4, 2008

LiveOffice Mail Archive SaaS is designed

to help IT simplify archive management strategies and secure email data without placing a burden on internal finances.

LiveOffice Mail Archive

Cloud storage archiving platform for streamlining user emails

\$8 per mailbox, per month; includes unlimited storage and personal archive access for end users

(800) 251-3863

www.liveoffice.com



STORAGE JULY 4, 2008

Hard Drive Destruction With No Caveat

Verity Systems' VS7000 Hard Drive Destroyer Prevents Data Theft

THE DISPOSAL OF computers requires careful forethought; not only should electronics be disposed of in an environmentally friendly manner, but obsolete hard drives often contain sensitive data. Simply tossing an old hard drive in the trashcan is not effective disposal; anyone can retrieve the

drive and access the data it contains, even if all the files on the drive have been deleted and erased. Leaving data on

a discarded hard drive is unwise for any computer user, but it can be disastrous for a

business. Physically destroying a hard drive is a surefire way to ensure that no data can ever be mined from a particular device.

The Verity Systems VS7000 Hard Drive Destroyer is specially designed to render a hard drive completely useless. It's completely self-contained, needing only a minimal amount of hand cranking to operate; this makes it particularly useful if a situation arises wherein expeditious disposal is necessary but electricity is unavailable.

The VS7000 can destroy any standard hard drive or laptop drive in less than 15 seconds with only eight turns of the hand crank. A special ratcheting feature makes destroying multiple hard drives simultaneously or crushing especially resistant hard drives a minimal effort.

The VS7000 works by pressing down on a hard drive, bending it approximately 90 degrees. In doing so, the platters are bent and the heads, motor, and circuit boards are damaged, rendering the drive useless and the data unrecoverable.

Verity Systems

\$4.12

Manual, portable device that physically destroys hard drives to prevent data theft

(800) 642-5151

www.veritysystems.com



SECURITY JULY 4, 2008

Keep An Eye On Network Traffic

Palo Alto Networks' PA-2000 Series
Of Firewalls Offers Affordable Protection

COMPANIES THAT HAVE remote branch offices and swelling ranks but limited IT staff face vulnerabilities to security threats.

Palo Alto Networks addresses these needs with the PA-2000 family of midrange firewalls. The firewalls enable midsized enter-



prises, as well as those with remote locations, to have comprehensive visibility and policy control over network flow and the applications therein, all at a cost-effective price.

Features of the PA-2000 series, which consists of the PA-2020 and PA-2050, include purpose-built hardware, identification technology, and PAN-OS, a security-specific OS with integrated networking, threat prevention, and management features.

Other features include App-ID, User-ID, and Content-ID. App-ID provides visibility and control of hundreds of applications, and it enables policy enforcement according to application, category, underlying technology, behavior, and risk. App-ID functions regardless of application port, protocol, encryption, or evasive tactic.

For user- or group-specific policy definition and reporting that integrates with Active Directory, the PA-2000 firewalls sport User-ID. The Content-ID feature

facilitates real-time, broad-based threat prevention, URL filtering, and file blocking. The PA-2020 model features throughput of 500Mbps, while the PA-2050 offers 1Gbps.

The firewalls boast a high-speed backplane and up to 20 traffic interfaces and dedicated out-of-band management interfaces.

Palo Alto PA-2000 Series Firewalls

Start at \$12,000

Provide cost-effective firewall protection for midsized enterprises or those with remote branches

(866) 207-0077

www.paloaltonetworks.com



SECURITY June 27, 2008

Computrace

Computrace Technology Goes Mobile

Absolute Software's Secure Data & Asset Management For Handhelds

As BUSINESSES OF every type and size go more and more mobile, an important need arises: keeping all those mobile devices secure. Computrace Mobile from Absolute Software offers IT asset management and remote data delete software to address these needs. Based on Absolute's Computrace

technology for desktops and lap-

tops, Computrace Mobile provides companies with central management capabilities for their handheld mobile population.

With Computrace Mobile installed on a device, IT administrators can remotely delete all or selected files, which helps prevent sensitive data from falling into

the wrong hands and meets compliance standards. Admins can do all of this through a single interface. Further assistance is available through Absolute Software's Customer Center.

Once the Computrace Agent (the technology that "calls home" if a device is lost or stolen) is installed on a device, users can customize reports or

select from any of the preconfigured ones to glean information on hardware, configuration, user profile, and installed software. From the password-protected Computrace control panel installed on the device, users can force a test call; view the time, type, and success of the test call; view ESN; view version information; and change the password.

Absolute Software Computrace Mobile

Can be added onto an organization's existing Computrace product; pricing is dependent on the package type

Provides secure IT asset management and remote data delete capabilities

(800) 220-0733

www.absolute.com



Messaging & Telephony

JUNE 27, 2008

Intelligent Capture & Exchange For Business

Communications

Kofax's Communication Server 8.0 Adds Increased Functionality

THE EFFICIENT and highly functional exchange of information is vital to the success of any company. Businesses need to be able to pass information among parties and keep a reliable archive of all messages. Kofax Communication Server 8.0 (known in previous iterations as TOP-

enterprise fax server, but it can also be connected to applications such as those from SAP, Microsoft, Novell, IBM, and other ISV systems. A number of new features have been introduced in this version of Kofax Communication Server, among them VMware server virtualization sup-



CALL Communication Server) addresses the need for a single, central communication application.

Kofax Communication Server 8.0 is designed to automate the exchange of information between high-end, mission-critical applications. All inbound and out-bound electronic messages in virtually any format—including email, fax, voice-mail, and SMS—can be routed across large distributed environments with the server. Further, Kofax Communication Server 8.0 can convert messages from one format to another and archive each one.

Kofax Communication Server 8.0 can be configured as a high-volume

port, advanced email functionality, support for H323 and SIP, and enhanced FoIP (Fax over IP) capabilities. It also supports disaster recovery systems and environments such as Lotus Notes 8, SAP NetWeaver 7.0, and Windows Vista.

Kofax Communication Server 8.0

Offers enhanced support for FoIP, advanced email functionality, and virtualization support

(949) 727-1733

www.kofax.com



NETWORKING & VPN

JUNE 27, 2008

A Greener VPN

Columbitech's Mobile VPN Conserves Battery Power On Your Mobile Devices



With transparent access to applications and enterprise content, mobile users can work from any network connection with Mobile VPN.

VPN IS ESSENTIAL for business travelers, but many mobile users find that using a VPN connection quickly drains the batteries on their mobile devices. Columbitech's Mobile VPN requires 40% less battery power than traditional VPN tools, enabling secure remote access to the corporate network without crippling the battery life on the traveler's laptop or mobile phone.

Mobile VPN is completely software-based, so IT staff members don't need to install additional, dedicated VPN servers. The use of existing hardware resources provides energy savings and lowers the company's capital expenses. And Mobile VPN's software-based approach also allows you to secure wireless legacy equipment, which can help extend the lifetime of network hardware.

Unlike conventional VPNs based on IPSec and L2TP (Layer 2 Tunneling Protocol) for wireline networks, Columbitech's Mobile VPN uses SSL-based VPN with software running at the session OSI level to avoid issues at the application layer. Mobile VPN's session-level architecture allows the VPN connection to meet mobile user demands for stable, transparent use. If a wireless connection drops, Mobile VPN keeps the session open until the user can reconnect to the Internet.

For security, Mobile VPN uses the WTLS (Wireless Transport Layer Security) protocol—the common standard for protecting WAP mobile phone transactions. The strong authentication and encryption tools let remote workers securely transmit confidential data to the corporate network, regardless of location.

Columbitech Mobile VPN

Provides secure and seamless access to enterprise applications from mobile devices

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www.columbitech.com





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PROCESSOR

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UPS & Power Equipment Update

The Ins & Outs Of Data Center Power

by Sixto Ortiz Jr.

POWER IS, without a doubt, the lifeblood of the data center. After all, without the electricity equipment needs to run, a data center becomes a large collection of unsightly metal boxes. But there is much more to power management than simply flipping on a switch and watching hardware come to life.

The effective management and distribution of power in the face of steadily increasing demand make the use of UPS and power equipment an absolute necessity in today's data center.

Power Trends

One trend that emerges in the area of UPS and power equipment today is the everincreasing power loads that data centers are seeing. Kris Domich, principal consultant for data center and storage solutions at Dimension Data (www.dimensiondata.com), says 10 years ago, most IT organizations would not have predicted the power densities in today's average rack, where they can easily reach 15 to 20kW.

"This is a staggering amount of power," says Domich, "and many medium-sized data centers have difficulties sustaining and planning for these high levels."

Key Terms & Technologies

N+1: A system in which all components ("N") have at least one backup component, such that the overall system integrity is not compromised by the failure of any one component.

PDU (power distribution unit): A device used to distribute electric power to multiple devices; for example, a PDU takes high voltage and amperage and reduces it to levels required by whatever devices are connected to the unit.

UPS (uninterruptible power supply):

Device designed to supply continuous power, even when utility power is not available, by supplying from a different source, such as a battery. Three general types of UPSes include offline, line-interactive, and double-conversion (aka online).

Jeff Sturgeon, vice president of marketing at Emerson Network Power's Liebert Division (www liebert.com), also points to the increased power loads as an important trend for UPS and power equipment. The power load is increasing, and the trend is toward scalable UPS units not only at the rack level but increasingly including room-level UPS protection, says Sturgeon.

Ramesh Menon, worldwide product line manager at Eaton (877/785-4994; www

.eaton.com), says today there is a need to increase efficiency while reducing costs. And, he adds, the use of blade servers is causing power consumption to rise quickly, even as the cost of power rises. The requirement for stable power is much higher today than it ever was, so businesses are demanding more powerful UPS systems.

Menon sees increased interest in highly efficient products that reduce energy costs and environmental impacts. Also, he says, consumers and manufacturers want energy management and monitoring capabilities, as well as modularity and scalability.

New Technologies

One of the new technologies impacting UPS and power equipment is a marriage of two data center infrastructure elements: power and cooling. Dimension Data's Domich says high-efficiency UPS and power distribution systems that have a data path to the cooling systems are keys to efficiency. This is because cooling can account for up to 50% of the overall electricity consumed in a data center simply because cooling systems have historically been designed to run at full output all of the time, he adds.

But, says Domich, calibrating the cooling delivered to the power consumed is a sensible strategy. "The amount of cooling is directly tied to the amount of power consumed, and so it makes sense to throttle the cooling system to the data center load," he notes. Smart cooling systems and UPSes do this, minimizing unnecessary power costs and lessening environmental impacts, he adds.

Cyber Switching's (408/436-9830; www .cyberswitching.com) Director of Marketing Gisa Abiog says more and more corporate

customers are realizing the value in intelligent or remote monitored and controlled PDUs (power distribution units). Customers who were once uncomfortable with the cost or the potential for hacking incidents with these units are now specifying them as standard equipment in their data centers.

One key feature of the technology, says Abiog, is the ability to obtain even more granular control and measurement functionality with individual current monitoring capabilities. This allows users to understand the current draw from each device plugged into the PDU, allowing insights into the efficiency of equipment. In addition, with the rising concerns about energy management, the ability to provide individual current monitoring and shut down managed devices as needed will go from luxury feature to a requirement, adds Abiog.

These intelligent PDUs, says Herman Chan, director of Raritan's Power Management Business Unit (www.raritan.com), can provide meter power at both the PDU level and the individual outlet level, collect environmental data, remotely power servers on and off, and even send user-defined alerts when problems such as rack hot spots or low power levels in UPS batteries occur.

Another development in this area is parallel POD (power output distribution), allowing the parallel connection of several UPS units and different configuration options, including N+1 with redundancy, Sturgeon notes. In addition, even though it is not a necessarily new development, the increasing demand for online double conversion UPS protection is a notable development, he adds. With online double conversion, SMEs can protect their servers against electrical disturbances and outages by supplying constant

power and ensuring longer asset availability.

Menon says line-adaptive technology delivers greater than 90% efficiency at smaller loads, an improvement over current products that only become efficient at 80 to 100% loads.

Yet another trend is the removal of the inverter section in a UPS system, which increases efficiency, decreases maintenance costs, and decreases overall manufacturing costs due to the elimination of the inverter section, says Jia-Ming Li, CEO of Tri-Mag (559/651-2222; www.tri-mag.com).

Even though Tri-Mag has held the patent for an inverterless UPS for several years, he adds, the technology has not yet reached wide acceptance, mainly because most engineers are still unwilling to accept the concept of a UPS system without an inverter.

Future Concerns

What are some of the issues facing UPS and power technology? One critical issue is the fact that equipment densities will continue to rise, and the traditional ways in which SMEs tackle this problem may no longer be viable, says Domich.

"As we try to combat this with traditional methods, such as relying on static pressure cooling and running CRACs increasingly at 100% to maintain unnecessarily low temperatures in the data center, we will find that the overall efficiency of power-to-productivity of our data centers will continuously decline," says Domich. The solution is to invest in modular and efficient systems that provide proper power and cooling and prevent data centers from becoming deficient at doing so, he says.

Everyone in the industry needs to think of ways to reduce power consumption, says Abiog. "We need to create solutions which proactively manage energy," she adds.

In addition, says Abiog, the gap between IT and facilities needs to be addressed and mitigated. "If these two entities can speak and understand each others' requirements, the deployment of infrastructure which will benefit all end users in the corporate environment will be smoother, less costly, and will take less time," she says.

Another concern, Menon says, is the fact that the power grid isn't getting any better as consumption ramps up. The impact of extreme climate change is expected to exacerbate the stress on the power grid even more.

The importance of infrastructure elements such as power and cooling will only become more important in the coming years as businesses demand always-on availability.

STORAGE June 20, 2008

Meet The Newest RAID

NetCom USA Introduces RAID Storage Systems For Critical Data

THE NR6 FAMILY of RAID storage systems is the newest member of NetCom USA's storage solution offerings. Available in capacities of 2, 4, and 8TB with data transfer speeds up to 400MBps, NR6 storage systems are a fast, reliable solution for storage of mission-critical data.

NetCom USA's NR6 family of storage products is ideal for increased network storage capacity, medical image storage,



HD video/audio productions, and near-line backup.

Businesses generate more data than ever before and require fast, continuous access to their information. The NR6 family of storage systems provides protected storage of important information including emails, accounting reports, marketing assets, engineering projects, and creative productions—quickly and safely—while remaining cost-effective.

NetCom USA provides proven RAID technologies for data protection that secures information and ultra-fast access to data for increased productivity.

Features include:

- A factory-matched HBA (host bus adaptor) for PCI, PCI Express, or PCI-X
- Compact 2U rackmount design
- Dual hot-swappable power supplies
- Removable and lockable drive trays for added security

• Easy installation (often completed in just minutes)

The NR6 systems provide safe, economical storage expansion for IT networks and support Windows, Linux, and Macintosh operating systems. RAID levels supported include 0, 5, 6, and 10 for maximum performance and data protection.

NetCom NR6 RAID Storage Systems

Starts at \$4,649

Available in capacities of 2, 4, and 8TBs with transfer speeds up to 400 MBps

(949) 553-0110

www.NetComUSA.com



Arranging Racks

Continued from Page 1 front-to-front and back-to-back, as this

boosts rack accessibility and forces the hottest surfaces to face each other rather than contribute heat to a cold surface. This

Key Terms & Technologies

High density. Today's servers pack massive computing power into increasingly small enclosures. While this high density creates more available space, it also ramps up power and cooling needs.

Hot aisle/cold aisle. This popular concept positions racks front-to-front and back-to-back to prevent equipment from taking in the hot exhaust of other equipment. The resulting hot and cold aisles are easier to manage from a cooling perspective than interspersed equipment.

Side-venting. Many devices include intake vents on the front and exhaust vent on the back. But side-venting equipment puts these features on the sides, which in turn creates challenges for data center personnel trying to determine proper positioning.

configuration creates hot aisles and cold aisles, which can be more effectively managed than a hodgepodge configuration of servers that leads to hot spots across the data center.

"When planning a hot aisle/cold aisle alignment for the data center, consider the normal airflow in the room and be sure it isn't working against plans for cold air intake and hot air output," says Phil Dunn, senior product manager for Knurr racks and enclosures at Emerson Network Power (www.emerson.com). "Also, use blanking panels to eliminate gaps between racks and to fill unused 'U' space that would allow cool air to escape."

Consoli notes that proper placement of high-density equipment can appear counterintuitive. "High-density equipment racks should be 25 to 30 feet away from airconditioning and cooling equipment, rather than right next to it. The best cooling occurs where static cooling pressure is higher, which is away from the cooling equipment where velocity is lower but static pressure is higher," he says.

Outside The Box

Addressing the challenges delivered by high heat loads is a primary driver behind effective equipment placement, and over the years, data center architects have devised valuable guidelines that are now in place in data centers around the globe. But these guidelines are just that—guidelines—and don't always account for equipment variances and other challenges.

"If your data center has a significant amount of equipment that is side-venting—meaning that intake and exhaust come out the sides rather than the front and back—you do want to be careful with their placement," Alger says. "Try not to install several side-venting systems adjacent to one another, such that the exhaust of one device feeds into the intake of another."

If placing side-venting systems near each other, Alger suggests staggering the height of the machines, installing vertical air baffles between the equipment, and/or placing sizeable (12-inch-wide) vertical wire management between the adjacent racks.

A healthy dose of common sense can also prove beneficial in the positioning process. Emerson's Dunn recommends racks be placed out of the traffic flow and that unauthorized access to the cabinets be prohibited. He also advises the use of controlled power strips, which turn off unused receptacles to prevent people from plugging in inappropriate devices to the rack's PDU.

Row Your Servers

Although experts generally don't warn against placing certain types of equipment near others on the data center floor, there are schools of thought about organizing disparate groups of equipment. For example, a common approach is to group like equipment together, which could see servers of one brand in Row 1, servers of another brand in Row 2, and so on.

"This approach has some operational advantage in that equipment vendors only ever need to go into a particular row to perform installations or maintenance. The drawback, though, is that you inadvertently end up putting all of the hottest gear together, all of the heaviest gear together, and all of the equipment with the greatest cabling density together. Unless the data center was designed with different levels of cooling, structural loading, and cabling in those respective rows, you have a problem," Alger says.

There are placement alternatives that can help in avoiding those problems. Alger says that the peaks and valleys of demand upon a data center's physical infrastructure can be flattened by assigning rows to different business units, as the assortment of computing needs can naturally shuffle equipment configurations in each row.

"Another solution is to get around the question of where to place individual equipment altogether by virtualizing machines," he says. "You create a server farm and then use the network to assign computing resources to a variety of projects. This greatly increases the efficiency and utilization of the equipment. You end up doing more with less gear, which ultimately means you need fewer servers and storage devices."

Data Center Power Efficiency

Continued from Page 1

The Department of Energy's DC Pro (which is short for Data Center Energy Profiler) is more verbal, less mathematical. It asks an IT manager a six-page series of questions ranging from "Do you have premium efficiency motors on all cooling supply fans, pumps, and cooling towers that serve the data center?" to "Are you using virtualization to consolidate your server workloads?"

Many of the DC Pro questions get simple yes/no answers. Some require percentage answers. Some are based on hard numbers, such as the one asking "What is a typical (average) IT equipment intake temperature?" Others, such as those asking about HVAC redundancy, appear more related to the SME's IT philosophy. All are aimed at getting an SME to focus on energy efficiency in the data center.

"The idea behind developing these efficiency standards is that when data center managers are comparing their facilities against other facilities, or even against their own facilities, they are talking the same language," notes Calvin Nicholson, marketing manager with Server Technology (800/835-1515; www.servertech.com). "You cannot improve on something that you are not measuring," he continues.

Nicholson notes that, in bygone years, as long as the data center was up and running, nobody cared about what it cost to run it. "Now with the one-year operation cost approaching the cost to purchase a server, power efficiency is a big concern," he says.

Data centers consume massive amounts of energy, Stout notes. "The consumption is large enough [that] they [data centers] consume a measurable percentage of the world's power output. These new standards will greatly reduce the need for added power generating capacity, reduce world oil and coal consumption, and trickle down to improving our environment," he says.

Green Grid Standards

Nicholson says he feels PUE and DCiE, known as the Green Grid standards, "are by far the leading candidate[s]" in the run to see which set of metrics will be recognized universally as a standard benchmark. "They are being adopted by other groups, like the Code of Conduct in Europe, which is copying these metrics," he says. "The Green Grid is also going international."

Stout says both SMEs and giant Fortune 500 firms use basically the same equipment, and the power rules are the same for both. "The reduction of power consumption for

the facility, lighting, noncomputing equipment, air conditioning, and data center equipment will come from new or improved technologies designed into all of the equipment used in areas stated, as well as areas external to the data center," he says.

Another good source of power consumption data, Nicholson says, is The Uptime Institute. "The Uptime Institute has a couple of good metrics that are also being used a lot," he says, "but in many ways, they are similar to these metrics."

Nicholson says that the two Green Grid metrics deal with the power used by the IT equipment vs. all of the power used within the facility. "One is just the inverse of the other," he says. "The Uptime Institute's metrics are a little different. For us, it is very interesting because our power distribution units are right where the IT equipment is plugged in, and it is very easy for us to know the power used per outlet, per device, per application, per rack, or even over multiple racks," Nicholson says. "So our devices tie very nicely into these new metrics."

Not everyone likes to be tested or monitored, but showdowns happen all the time. "I think that adoption has been slow," Nicholson says. "But testing is coming in the future. All companies will be looking at moving forward with adoption at some level."

New Technology To Reduce Consumption

It may be possible to cut some power consumption in data centers in nonstandard ways. "One interesting technology being looked at is the elimination of the typical AC to DC power supply used in blade servers," says Calvin Nicholson, marketing manager with Server Technology (800/835-1515; www.servertech.com).

The individual blade servers would not have individual power supplies producing the needed +5vDC (volts of DC power), +12vDC, -12vDC, and other low DC voltages from the utility power

source. Instead, Nicholson says, the blade servers would be designed to operate directly from a single ±380 to 400vDC power bus.

Nicholson says, "Due to the single power supply with an improved efficiency, less loss in internal and external server wiring and other factors, a 12 to 14% overall efficiency improvement—with the associated percentage reduction in cooling demands—might be realized for the entire data center. This technology would be a remarkable first start to data center power reduction."

SECURITY June 20, 2008

Network Monitoring For SMEs & Beyond

Ipswitch's WhatsUp Gold Version 12 Gets Bigger & Better

BUSINESSES GROW CONSTANTLY, and networks must adjust to changing demands. Yet, as important as it is for a network to be able to scale upward, every company has to start somewhere. Having network management tools that can grow with a business from a small enterprise to a large one is valuable.

WhatsUp Gold from Ipswitch has been addressing this issue for over 15 years. The most recent version, WhatsUp Gold 12, has added several new features, including Split Second Graphs, which allow administrators to more quickly identify any problems and take proactive steps toward resolving issues—in seconds,

not minutes. Additionally, real-time data can be added to full reports to give administrators a more complete picture of network health, which is continuously updated as real-time information flows in.

Through the various workspace views, administrators can see current device usage data via the InstantInfo pop-ups feature just by hover-

ing the cursor over device or network interface links. Also new are the Web Task Manager and Web Performance Monitor, Web-based tools that extend the functionality of Windows tools to every user.

WhatsUp Gold is designed to provide easy-to-use management and monitoring

interfaces, transparent upgrade paths, and low total cost of ownership. With a bevy of plug-ins on the way, WhatsUp Gold can be expanded to suit the needs of any enterprise.

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Understanding Cooling Equipment

Knowledge Is Key For Efficient Cooling In The Data Center

by Elizabeth Millard

BECAUSE OF THE amount of heat thrown off by equipment—particularly high-density machines such as blade servers—being able to cool a data center properly is crucial for maintaining uptime, using power effectively, and keeping hardware running well.

Here are some key strategies and basic information that can boost cooling efficiency in any data center.

Cooling Is A Multilayered Process

Unlike a home, in which a central air-conditioning unit might reach every room through vents, data center cooling usually involves a number of different elements because a room is rarely uniform in temperature.

For example, servers along one wall will create a "hot zone" compared to the rest of the room. In order to even out hot and cool areas, data centers might employ raised-floor cooling, which pipes cold air below special floor panels and lets it rise up through small openings, as well as in-cabinet cooling, used for especially heat-prone, high-density equipment.

A general cooling system will keep the room at a certain temperature, but also helpful is the creation of hot and cold aisles, which cool the equipment on one side and exhaust hot air on the other.

In general, it's important to think about a data center as a collection of different areas rather than as one large room that has to be cooled accordingly. The use of smaller airconditioning units and more targeted cooling helps to put the chilly air where it's needed and prevents the inadvertent creation of hot zones.

To Keep Cool, Think About Heat

Call it the yin and yang of air conditioning: If there's cooling, there has to be heat—and vice versa.

Although portable cooling systems exist, they're not like printers that can just be rolled into the room and work, says John Wheeler,

an area manager for Atlas Sales & Rent-

als (510/713-3313; www.atlassales.com), a provider of portable air conditioners, heating equipment, and dehumidifiers.

As a result of cooling, warm air is created and must be vented out of the room, similar to a home air conditioner that has to sit in a window in order to transfer the hot air outside. It doesn't matter how large or how small an air conditioner might be, Wheeler notes—they all produce hot air, and having improper venting will create inefficiencies and could sabotage other parts of a cooling system.

Know Your Heat Load

Another aspect of knowing about heat is to figure out exactly how much is being generated by the equipment that's in use.

This can be determined by looking at manufacturer specifications for each piece of technology and then doing the math, Wheeler says. Included in the equation will be the size of the room and the heat load of equipment.

So, for example, when trying to cool a 400-square-foot room with four servers, a manager would need 12,000 BTUs (1 ton) of cooling just for the room.

If each server required 700 watts

of power and the conversion is 1 kilowatt for 3,400 BTUs, that means the data center would need close to 2 tons of cooling between the servers and the room itself, Wheeler says.

"It's kind of like doing a math problem in school," Wheeler says. "But vendors can also help to make sure the numbers are right. The important thing is to take the time to know your heat load, because that's what determines your cooling."

Increase Power Efficiency

Hardware that's older or less efficient than it could be might not cost much when it comes to maintenance, but those

costs could show up in power and cooling down the line, notes Steve Cumings, director of marketing for storage, networks, and infrastructure at HP (www.hp.com).

"There should be a holistic approach," he says. "Reducing energy consumption will affect cooling and vice versa. The two are intertwined."

Cumings suggests that data center managers keep up with best practices through industry associations, which have determined standards for everything from the height of a raised floor to the width of a cold aisle.

Taking a step back from looking at cooling to look at power efficiency, data center design and setup, and best practices can help create an integrated view of a space that helps to put cooling into perspective.

"There are many small efficiencies that might not seem related to cooling, like changing how equipment is arranged, but it will make a difference," Cumings says. "Just addressing one aspect of data center operations, like cooling, isn't enough. You have to make sure everything is working in conjunction with other aspects of your strategy."

Cooling Is An Ongoing Process

Once a system is set up with different cooling zones, multiple types of air conditioning, and perhaps in-cabinet cooling, a data center manager can take it easy—but not for long.

Even if hardware isn't added and servers aren't moved, cooling will be affected by other factors, such as outdoor temperatures, power outages, and air conditioner usage. Because the units have dehumidification and humidification functions built in, they have to be checked regularly for any leaks or cracks that could result in a waste of energy or improper venting.

"With cooling comes the chance of humidity inside a system, and most units need to be looked at often for wear and tear," says Eric Birch, executive vice president at DegreeC (www.degreec.com), a company that develops systems that can intelligently manage airflow in data centers. "Especially if there are multiple cooling strategies in place, monitoring humidity levels is an important, ongoing task."

Thanks to the wealth of options in the marketplace, data center managers have many choices for cooling and equipment that's suitable even for closet-sized areas. But along with equipment comes the need for planning, knowledge, and monitoring on a consistent basis.

Key Terms & Technologies

Close-coupled cooling. A system that brings cooling equipment closer to heat sources rather than cooling an entire room. These systems include rack-based and row-based technologies.

Condensation collection. All air conditioners collect condensation because of their dehumidifier functionalities, so IT managers should look

for systems that have collection capabilities—usually a tank or a pump that takes the water out of the building.

Liquid cooling. A system that uses air and liquid heat exchangers and can be custom-built. Considerations for implementing this type of system are access to refrigerant supplies and anticipated heat loads.

SECURITY June 20, 2008

Email Archiving With Data Integrity



ArcMail's Defender U3160 Improves Productivity & Reduces Strain On IT Resources

EMAIL HAS BECOME the *de facto* means of communicating in an office setting. Archiving all that data is important, and managing it effectively can help a company improve productivity and reduce the strain on IT resources. It's crucial to ensure data integrity so archived data can't be altered.

ArcMail Technology addresses these needs with Defender U3160, a standalone appliance with 16TB of storage that provides comprehensive archive and data management. The appliance operates seamlessly in the background. Both administrators and end users can use a simple, Web-based

interface to search for and retrieve archived email data. ArcMail Defender U3160 can be used either in the office or remotely.

Admins have a vari-ArcMail Defender

ety of abilities with ArcMail Defender U3160, including being able to monitor system settings and produce reports to ensure that emails are being successfully archived. Once data has been archived, it's protected by data integrity and encryption technology to ensure that data that has been backed up and subsequently restored can't be altered.

ArcMail Defender U3160 is easy to install, use, and manage and captures all inbound, outbound, and internal email with

the mail server's journaling function. Operating on the Linux platform, the appliance is compatible with Microsoft Exchange, Lotus Notes, Groupwise, and other mail servers with journaling functionality.

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Trends In Storage Networking

Keeping Pace With The Evolution Of NAS, SAN & More

by Drew Robb

STORAGE-AREA NETWORKS (or SANs) used to be the province of large enterprises. Then NAS (network-attached storage) and IP SANs came on the scene to bring storage to the SME world. All of a sudden, small and midsized enterprises could run their storage systems using Ethernet connections, which brought down the costs of storage considerably.

Recent developments in the storage world include the maturation of NAS and IP SAN technology to provide ease of use, as well as the advent of higher-end SAN gear that is becoming increasingly attractive to certain facets of the SME sector. The question is, which storage networking technology is right for you?

NAS Usage Growing

NAS consists of a specialized way to serve up files: Instead of a file server, you buy a NAS box (also known as a NAS filer or storage server), which has the advantage

Key Terms & Technologies

Direct-attached storage. DAS is when the storage is hooked up directly to a specific machine as opposed to residing in a network that is accessible to multiple machines.

Fibre Channel. FC is the protocol used for communication between devices in a SAN.

Host bus adapter. An HBA is an adapter card that fits inside a server in order to connect it to a SAN.

IP SAN. This is a SAN that uses an existing Ethernet network for storage purposes.

Network-attached storage. A SAN is a specialized kind of file server that can store large quantities of files and serve them up quickly over an Ethernet connection.

Storage-area network. A SAN consists of computers and storage equipment that are connected over a high-speed optical network.

SECURITY

of being able to store large quantities of files and serve them up quickly over an Ethernet connection.

According to the analyst firm IDC, the NAS market grew 11.4% in 2007 to \$668 million. "We are seeing strong demand for NAS systems aimed at easing the pain associated with managing file-based data," says IDC analyst Brad Nisbet.

Much of the growth in the use of NAS is being fueled by the SME sector; IDC reports annual storage capacity growth in small and midsized businesses of 50 to 60%. But all that growth can come at a price: Once you move above a handful of NAS filers, you end up with administrative problems, and moving files or users can become a real hassle. Enter FAN (filearea network) technology, which virtualizes a collection of NAS boxes and file servers. As a result, all data can be managed by a single file system. According to IDC, a FAN allows organizations to reduce storage costs by 50 to 80% and improve management efficiency by up to 90%.

Similar to server virtualization, FANs add a logical layer known as a global namespace. Vendors such as EMC (www.emc.com), Microsoft (www.microsoft.com), F5/Acopia (www.f5.com), and Brocade (www.brocade.com) implement this either via a purpose-built appliance or software that resides on a server in order to enable server administration, file reorganization, and consolidation.

IP SAN vs. Fibre Channel SAN

As NAS is file-based technology, however, it imposes limitations when it comes to storing and managing data; hence the interest in IP SANs. They provide much of the functionality of a full-fledged SAN but use an existing Ethernet network to transport data, manage storage, and organize backups. Thus, there is no need to set up an expensive FC (Fibre Channel) network. Plenty of

SMEs are moving to IP SANs as a low-cost SAN alternative.

"IP SAN performance still lags FC performance, but it's very competitive," says Mike Karp, senior analyst at Enterprise Management Associates.

However, while NAS or an IP SAN are cheaper, an FC SAN runs over faster and more reliable connections. Yet in these days of tightening purse strings, it is perdown compared to the previous year, yet the high end is experiencing a growth spurt. This indicates that companies are focusing on the core of the data center as opposed to the periphery, Dell'Oro says. "Companies in the 500- to 1,000-

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"Companies in the 500- to 1,000employee range in fields like insurance, banking, IT, video, and safety fields are deploying high-end switches to take advantage of higher performance," she says.

The latest gear provides speeds of 8Gbps, as opposed to the 1, 2, or 4Gbps equipment you are likely to find in most SMEs.

Coming Down The Pipe

The business world can also look forward to better disks in the near future. Many disk and components manufacturers are getting excited about the 6Gbps SAS (serial-attached SCSI) specification. As the next-generation storage interface to traditional SCSI, SAS was originally intended for internal and external

DAS (direct-attached storage) environ-

ments. But its ability to support

SAS and SATA drives has led to its rapid adoption as a drive interface in external storage, which led to its use in creating tiers of storage, with SAS used for speed and higher availability, and SATA used for

bulk storage.

"Going to 6Gb
SAS is the next
natural evolutionary step for
SAS," says Henry
Fabian, executive
director of enterprise product marketing at Seagate
Technology (www
.seagate.com). "6Gb
SAS offers a 2x increase in speed."

high capacity and

What this really means, then, is the death knell for regular SCSI, according to Fabian, which cannot compete with the speed, scalability, and ease of use present in 6Gbps SAS.

"Starting in the first half of next year, you will see drive manufacturers discontinuing the production of the older parallel SCSI drives," says Fabian.

haps surprising that higherend (and therefore more expensive) FC switches are the main

According to Tam Dell'Oro, president and analyst at Dell'Oro Group, sales of lower-end storage and networking gear are

growth area in storage networking.

In these days of tightening purse strings, it is perhaps surprising that higher-end (and therefore more expensive)
Fibre Channel switches are the main growth area in storage networking.

there is no need to set up an expensive FC (Fibre Channel) network. Plenty of

Web Security For Every Size Of Enterprise

Aladdin's eSafe v6.2 Proxy Expands Security Options For The eSafe Family

INTERNET-RELATED SECURITY THREATS are nothing new, but they're as dangerous as ever. Checking for Internet threats in real time is a powerful way to combat malware of every kind. Aladdin Knowledge Systems' family of eSafe products is designed to address security issues on



multiple levels. The latest addition to the arsenal is eSafe v6.2 Proxy, a Web-security application for both in-line and proxy implementation.

By virtue of its implementation options, eSafe supports virtually any network environment. Protection occurs in real time and is designed to help companies protect data, improve productivity, and enable compliance. eSafe can be deployed as a native proxy that integrates Microsoft ISA or as an in-line bridge/router, forwarding proxy, or ICAP proxy.

eSafe v6.2 Proxy is designed to inspect all HTTP, HTTPS, and FTP over HTTP traffic thoroughly to protect the network from viruses, spyware, spam, Trojans, and more. Aladdin designed eSafe v6.2 Proxy to provide complete protection, high performance, and intelligent and thorough inspection.

The eSafe family is a flexible security package that can be installed in enterprise environments in a variety of different modes. It's designed to work transparently, checking Web activity at the gateway to avoid impacting network performance.

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Secure Mobile Computing

Dolphin 7600 Now Includes GSM Wireless Technology & Windows Mobile 6

MOBILITY IS A MUST for business professionals. To access important data at any time is invaluable, which is why Honeywell Imaging and Mobility equipped its Dolphin 7600 Mobile Computer with GSM wireless technology and Microsoft's Windows Mobile 6.

With GSM wireless technology, the Dolphin 7600 allows users to stay connected no matter where they are. Wireless Full Area Networking, combined with

Bluetooth, 802.11, and GSM/GPRS EDGE, enables real-time data exchange and voice communications onsite or offsite.

The addition of Windows Mobile 6 enables users to be productive while they're traveling, with connections to email, calendars, and contacts. Windows Mobile 6 also has the ability to read and create Word and Excel files, as well as view PowerPoint presentations. The familiarity of a Windows operating system makes mobile computing simple and intuitive.

The Dolphin 7600 uses a 2.8-inch VGA color display for both viewing and



touchscreen use. Its backlit number and letter keypad is strategically arranged to enable one-handed operation. The Dolphin 7600's small, ergonomic design and durable construction is useful in both field and onsite operation.

In addition to its new features, the Dolphin 7600 Mobile Computer is integrated with Adaptus Imaging Technology 5.0, which allows users to capture a wide array of data such as bar-

codes, digital images, and signatures. This feature is especially useful for retail, parcel and postal delivery, field services, and task management applications.

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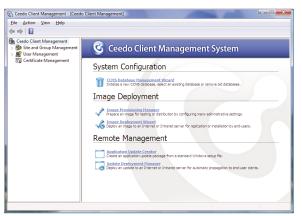
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NETWORKING & VPN

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addition, Ceedo Enterprise offers users the ability to customize their workspace through their own applications and plug-ins. This process does not require administrator involvement, the workspace is separate from the computer, and the installation of applications onto a Ceedo workspace can be done without packaging.

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prise applications, install new software, and update user files right away from a remote location. Ceedo can be installed on a USB device in order for installed applications to become portable for use on any PC running Windows 2000/XP/Vista, or it can be deployed in real time to a PC from a network or from the Web.

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STORAGE



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NETWORKING & VPN



Barracuda Load Balancer

The Barracuda Load Balancer integrates server load balancing and network intrusion prevention into an affordable and easy-to-use network appliance. Ideal for data centers with:

- Internet sites with high traffic requirements
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 Other ID and income and initiate and investment and income a
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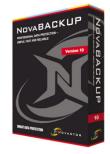
STORAGE JUNE 20, 2008

Customize Backup & Recovery

NovaStor's NovaBACKUP 10 Provides Local & Online Data Protection

DATA PROTECTION IS NOT ONLY CRITICAL for computer users, it's essential for the defense of PCs and servers. To secure user data, an SME must set a backup system in place.

NovaStor's NovaBACKUP 10, a comprehensive data protection and disaster recovery solution, supports both local backup and online storage. In the event of an onsite disaster, NovaBACKUP 10 takes a snapshot of the entire



system, which enables fast restoration of a local or network source. Online recovery can copy or mirror information to FTP, Internet storage accounts, or corporate servers.

In terms of flexibility, NovaBACKUP 10 enables users to restore all files or select specific files for backup. Users can also customize

backup times and, with the flexible scheduler, choose the right routine for automatic backups so they can track when their data is processed. Other convenient features include Smart Select backup for photos, music, documents, or emails and plug-and-play support for devices such as DVDs, CDs, Blu-ray discs, USB devices, and tapes.

NovaBACKUP 10 comes in three versions: Professional, Server, and Business Essentials. NovaBACKUP 10 Professional offers basic backup and recovery for single workstations running Win2000/XP/Vista and features 2GB of free online storage for one year. NovaBACKUP 10 Server is designed for Windows 2000/2003 Server and includes 5GB of free online storage. NovaBACKUP 10 Business Essentials offers 10GB free online storage for a year along with priority support. This version is suitable for SMEs running a single SQL and/or Microsoft Exchange Server.

NovaStor NovaBACKUP 10

Data protection and disaster recovery software that users can customize

Professional \$49.95; Server \$199.95; Business Essentials \$499

(805) 579-6700

www.novastor.com



SECURITY June 13, 2008

Core-To-Edge Detection

Endace's NinjaProbe Adds Snort IDS Support & Data Mining Capabilities

MONITORING THE security of a network requires network administrators to make sense of a constant flow of information from a variety of fronts. Malicious threats and anomalies of all kinds must be recognized and dealt with handily, and administrators must rely on their equipment to help them keep the network safe. All of this puts more pressure on NIDS (network intrusion detection systems) to do their job well.

Endace has improved on its NIDS appliance, NinjaProbe, with the addition of 10G Snort IDS, Applied

Watch Command Center Agent, and data mining capabilities. NinjaProbe is powered by Endace's DAG (Data Acquisition and Generation) technology. The new features are open-source and facilitate high-speed packet capture, intrusion detection, and analysis. They are designed to be easily deployable, powerful, and secure.

Endace's acquisition of Applied Watch allows NinjaProbe to integrate

well with Snort IDS' management tools. NinjaProbe captures all incoming traffic to disk, from the edge of the network to the core, so that

when a rule is triggered, administrators can address the problem and mine data concerning the event. And because the platform can operate on segments up to 10Gbps with continuous indexed rotary storage, analysts can collect and study data both before and after an alert.

The appliance's features can be managed remotely, including for Snort rule defini-

tion, download, and alerting, as well as data mining and platform configuration. Other features include traffic filtering and Netflow record generation, which facilitate data capture, performance management, traffic monitoring, and electronic surveillance to meet the full range of requirements.

Endace NinjaProbe

\$28,825

Provides core-to-edge detection and data mining for the network

(703) 964-3740

www.endace.com



STORAGE JUNE 13, 2008

Backup, Recovery & Disaster Protection

Sonasoft's SonaSafe Suite Beefs Up The Defense

PROTECTING DATA IS ONE of the most important things a company can do. Sonasoft's newest version of its SonaSafe Suite for Microsoft Exchange, SQL, and Windows Servers improves upon its ability to facilitate data backup and recovery.

SonaSafe Suite is designed for high availability by continuously updating data that was retrieved from the primary system

to the redundant, standby servers. The redundant servers themselves are designed to immediately take over for the primary system in the event of a disaster.

SonaSafe Suite supports SQL 7.0, 2000, and 2005; Exchange 2000, 2003, and 2007; and Windows NT/2000/2003/XP. Back-

up and recovery options are also available via a bootable CD and can be performed on systems such as VMware and Microsoft Virtual Server. The suite is controlled through a Web-based interface.

New features of the suite include dynamic mailbox backup, which makes larger amounts of mailbox storage possible on an

Exchange server. One complete backup is made, so only incremental backups need to be performed in the future, thus eliminating costs. Data retrieval is possible with a few mouse clicks.

Other new features include customizable ports and enhanced replication and recovery capabilities. Customers can now define and open ports for backup and restore functions, which is more secure than doing so on more commonly used ports. File level backup and recovery options are also increased.

Sonasoft SonaSafe Suite

SonaSafe Application: \$1,995 SQL/Exchange/File Systems Agent: \$995

Provides backup and restore functionality for Microsoft SQL, Exchange, and Windows servers

(408) 927-6200

www.sonasoft.com

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JUNE 13, 2008

Physical Infrastructure

Industrial PoE Splitter

Advantech's EKI-2701PSI Provides Power To Difficult Situations

POE (**POWER OVER ETHERNET**; also known as IEEE 802.3af) has proven itself in commercial and enterprise applications over the past several years. Using the unused wires in a 10/100BaseT cable, or by overlaying power on the data connections, PoE supplies 15.4W of power at 48VDC.

PoE is useful for powering network devices and equipment where it is inconvenient, expensive, or infeasible to supply

power separately. Connected between a standard Ethernet device and a PoE-powered connection, the Advantech EKI-2701PSI operates as a splitter, separating the PoE connection into a standard RJ45 Ethernet port and a removable screw terminal block capable of supplying nearly 13W at 24VDC.



Packaged in a thin DIN-rail mount chassis, the Advantech EKI-2701PSI is ideal where panel space is limited. It supports both standard 10/100BaseT and Gigabit 1000BaseT connections. It is also

ruggedized for demanding industrial applications, with 4,000 VDC Ethernet ESD protection, power line surge (EFT) protection of 3,000 VDC, power isolation, and output power short circuit protection. For maximum uptime in unattended and remote locations, the EKI-2701PSI features an extended operating temperature range of -40 to 75° C.

The EKI-2701PSI splitter is an ideal means to gain the benefits of PoE with standard Ethernet devices in harsh industrial environments. For applications with two or more devices requiring a PoE power source, the EKI-2525P 5-port industrial Ethernet switch is a great match.

Advantech EKI-2701PSI

Separates the PoE connection into a standard Ethernet port and a removable screw terminal block

(800) 205-7940

www.advantech.com



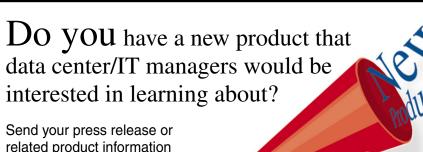
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Product Releases



related product information to press@processor.com.

Messaging & Telephony

- Codima has released an addition to the Codima Toolbox, called Codima Toolbox VoIP Management, which brings VoIP Topology Views directly in Microsoft Office Visio and merges pre- and post-deployment testing, monitoring, and troubleshooting into one program. With the Codima Toolbox VoIP Management program, IT personnel can accomplish VoIP testing, monitoring, and troubleshooting before installing VoIP and during daily operation. Additionally, this program features traffic simulation to view QoS (Quality of Service) and automatically explore network limits pre- and post-deployment.
- CounterPath announced the general availability of QC (Quick Conference), a SIP-based audio conferencing solution that allows enterprises to manage their own inhouse conferencing services while simplifying the end-user experience. With QC, any employee can set up an audio conference, whether they are onsite or working remotely, by dialing an extension off the enterprise PBX and then selecting an ad-hoc, four-digit bridge number of their choice. Employees

can also have a four-digit bridge number permanently reserved for their use only. QC also provides a variety of features designed around the needs of business users, including Web-based management, integration with CounterPath's Bria softphone, remote management, and calendar integration. Quick Conference can be integrated with any PBX through SIP trunking or a SIP/ TDM gateway and offers a range of security features to ensure the privacy and integrity of a conference call.

■ Unisys has extended the Microsoft services portfolio to include Microsoft Exchange Online, SharePoint Online, Live Meeting, and Office Communications Online. Additionally, the Unisys Email Management Solution will enable faster decision making and information access across mobile environments. This enhancement includes the following features: simplified email services, email service accountability, full life cycle managed service by SLAs, and roadmap service for multiple mobile communications. With this portfolio, end users can stay current with Exchange versions and updates as they manage IT budgets.

NETWORKING & VPN

■ GFI has announced the release of GFI EventsManager 8.1. This version provides alerts for key events and network intrusions via support for SNMPv2 traps altering. EventsManager enables you to send alerts by email, network messages, and SMS notifications through email-to-SMS gateway or service. The improved installation process includes optimized run parts, updated documentation, quick start guides, and efficient downloads. The ReportPack features reports for the PCI (Payment Card Industry) standard. EventsManager can also integrate with pre-existing monitoring systems.

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■ Parallels announced that Parallels Automation now integrates with Secure64 DNS to give service providers using Parallels Automation the ability to easily manage Secure64 servers within their data centers. Parallels Automation is customizable data center software that allows service providers to more efficiently manage their infrastructure. The integration of Secure64 DNS with Parallels Automation allows service providers the flexibility of choosing a more secure DNS solution. Secure64 DNS is a name server application based on Secure64's SourceT micro OS. The server application is designed with a secure architecture that blocks network attacks from rootkits and malware. Secure64 DNS runs on the HP Integrity rx2660 hardware plat-

PHYSICAL INFRASTRUCTURE

■ Kendall Howard has launched its Anti-Theft PC Security Stand, which it says is the industry's most advanced method for

NETWORKING & VPN

preventing PC hardware theft and damage. Unlike other stands that use plastic interlocks or cables, the Anti-Theft PC Security Stand is made of heavy-duty steel brackets, and users can screw the stand to a desktop. Additionally, the unit prevents unauthorized access to a system's hard drive and can secure an SFF (small form factor) PC and a 15- to 22-inch LCD monitor without hindering usage of the hardware. The stand features support brackets that are ventilated; high-grade security screws; and cable management for a mouse, keyboard, and headphones.

■ Panduit's PanView iQ System automates the documentation of physical layer connectivity and provides intelligent patch-field management without the need for additional rack space. The PanView iQ System offers panel managers and expansion modules, both of which attach to the backs of PanView iQ patch panels. Using the patch panels' keypads and Panduit's browser-based software, system administrators can run diagnostics and trace cables without handheld equipment or a dedicated fixed placement setup.

SECURITY

■ Check Point has announced the expansion of its UTM-1 Total Security appliance, which will allow customers to better match the right solution with their security and performance needs while protecting their network with the ease of an out-of-the-box application. UTM-1 Total Security combines firewall, VPN, intrusion prevention, SSL VPN, antivirus, antispyware, Web filtering, Web security, and antispam all into one manageable solution. New UTM-1 Go to Page 18

JUNE 13, 2008

NETWORKING & VPN JUNE 13, 2008

NX-9000 Sets The Standard For Scalability

Industry's First Gigabit WAN Acceleration Appliance



SILVER PEAK SYSTEMS' NX-9000 is the newest member of the company's NX family of appliances. The NX-9000 is the industry's first Gigabit WAN acceleration product, raising the bar for WAN performance and scale.

The NX-9000 supports up to 4Gbps of bidirectional LAN-side traffic and 1Gbps of bidirectional WAN-side traffic, with 8TB of local data store available for WAN deduplication. The newest Silver Peak appliance delivers up to 10 times the realtime throughput of competitive offerings.

The NX-9000 also includes two 10Gbps interfaces and four 1Gbps interfaces with EtherChannel bonding for physical connectivity between Silver Peak appliances and network elements, which is required for deployment in data center environments. As more hosts turn to multi-Gbps interfaces, the NX-9000 has the capacity required to support the corresponding growth in data volumes.

The NX-9000 is ideal for high-volume data environments and supports more than 256,000 simultaneous TCP flows. It optimizes all enterprise applications, including TCP traffic, real-time UDP traffic, latency sensitive traffic, and applications with dynamic data formats. Plus, NX appliances ensure that data is always secure, at rest and across the WAN.

The NX-9000 utilizes the following advanced optimization technologies to improve WAN bandwidth efficiency and accelerate application performance:

- Network Memory: Works on latency sensitive traffic and both TCP and non-TCP applications.
- Network Acceleration: Employs techniques that minimize latency caused by TCP and other chatty protocols.
- Network Integrity: Silver Peak is the only WAN optimization vendor to address lost and out-of-order packets in real time using adaptive FEC (Forward Error Correction) and POC (Packet Order Correction).

Silver Peak NX-9000

Starts at \$259,995

Gigabit WAN acceleration product

(888) 598-7325

www.silver-peak.com



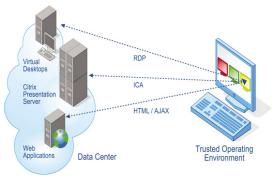
Alleviate Endpoint Virtualization Stress

Neocleus' Trusted Edge Provides Simple, Secure Endpoint Solution

AS PROFESSIONALS BECOME more mobile, there is an increased need to keep these employees securely in touch with company resources. But maintaining a virtual connection that is both secure and reliable can be difficult—especially because organizations cannot control the security of an endpoint operated by a customer or employee.

For this reason, Neocleus has launched Trusted Edge, which is designed to provide organizations with a program that connects customers and employees to corporate resources from anywhere in the world, regardless of the state of security. Trusted Edge will address issues that arise when managing and safely deploying applications, data, and services.

Trusted Edge implements a new Type 1, bare-metal hypervisor and a separate virtual trusted environment outside of Windows provided by new security plan and IT management framework. When putting Trusted Edge into operation, desktops will not need to be rebuilt, decreasing end-user downtime and costs. Trusted Edge can run other Windows-based applications upon customer demand and supports RDP, Citrix ICA, and Web interfaces. Authentication and configuration controls offer an easily managed virtual



endpoint environment, creating a win-win situation for both IT personnel and users.

Trusted Edge not only provides customers and employees with the flexibility of accessing company resources from anywhere, it also has continuously operating real-time remote confirmation of virtualized environment reliability.

Neocleus Trusted Edge

Base-level user licenses start at \$150 per user

Helps IT personnel, customers, and employees manage issues with endpoint virtualization

(201) 309-3042

www.neocleus.com



Product Releases

Continued from Page 17 models include the 1070 and the 2070. Model 1070 features 1,800Mbps firewall throughput, three managed sites, and six ports; model 2070 features 2,800Mbps firewall throughput, five managed sites, and eight ports.

■ Rackspace PCI Toolbox, a suite of hardware, software, and professional services aimed at helping companies in the PCI (Payment Card Industry) meet compliance standards, is now available from Rackspace Hosting. PCI Toolbox is designed to be a comprehensive PCI package that prevents companies from having to assemble pieces of a PCI solution manually and also meet PCI DSS (Data Security Standard). Components of PCI Toolbox can also be purchased individually. Support is provided 24/7/365 by Fanatical Support security experts. Features of the service includes antivirus protection, customer network scanning services, file system integrity services, firewall services, and more.

STORAGE

■ 3PAR announced the 3PAR InForm Management Console, a management interface designed to enhance 3PAR InServ Storage Server visibility, control, and management. Improvements have also been made to 3PAR's open API (application programming interface) SMI-S (Storage Management Initiative Specification), which is designed to enable heterogeneous enterprise management. These enhancements include volume provisioning, performance statistics, and LUN masking and mapping. Features of the InForm Management Console include Quick filter to easily filter tabular data for vital

system information access, wizards to streamline volume configuration, a complete view of all Virtual Domains, enhanced charting functions to enable specified objects to be graphed in various ways, and flexible export of management console data in CSV or HTML file formats.

■ Take any 3.5-inch SATA hard drive and turn it into an encrypted dockable and/or external unit with the Diamond Cipher kit from Addonics (model DCDCS256S; \$139). The kit encrypts data in hardware with 256-bit AES for on-the-fly protection. It allows the drive to dock in a 5.25-inch drive bay so it can be removed for security or mass data transfer purposes. Furthermore, the undocked drive resides in an enclosure that allows use as an eSATA or USB 2.0 external drive.

■ D3 (Digital Data Destruction Services) announced the launch of D3eraSE, a Tier 4 electronic data destruction service that permanently erases all data stored to a client's hard drives and/or flash media, making recovery impossible and the media reusable. A more secure solution than overwriting, D3eraSE is classified by the NIST (National Institute of Standards and Technology) as acceptable for company confidential documents and has been accepted by the Department of Defense for media containing secret data. D3's D3eraSE Tier 4 service protects against security breaches and complies with laws and regulations regarding data retention and privacy. This new service also provides organizations with high volumes of hard drives and flash media data security over less secure alternatives such as overwriting, as well as considerable savings by making the drives secure for reuse by fully deleting all traces of information stored on the targeted media.

. . . .

■ NTP Software has announced the release of NTP Software QFS Windows Edition 6.0 to aid customers in offering additional opportunities to take control of their unstructured data and improve their operations. QFS Windows Edition 6.0 features include DeepScan, which helps uncover the true nature of file data; ZipScan, which reveals the true nature of file data in archives; multilingual support for the NTP Software End User Support Infrastructure; and enhanced support for sophisticated Microsoft Active Directory configurations.

■ StoneFly released StoneFusion 6.1, a release of StoneFly's intelligent network storage platform. StoneFusion is integrated into all StoneFly IP SANs to provide blocklevel provisioning, as well as centralized storage management, control, and monitoring of logical storage volumes. Key updates to the software include support for SAS from StoneFly's entry-level ISC (Integrated Storage Concentrator) line of IP SANs, improved asynchronous replication for StoneFly Reflection, enhanced system management with SNMP, and performance improvements for larger virtual server environments. With support for SAS drives, the ISC line will better support transactionintensive and high-definition video streaming applications that require high disk performance. For support for large virtual server environments, StoneFly has doubled the number of storage volumes per IP SAN to 200. In addition, StoneFly now supports up to four 1Gb or 10Gb iSCSI ports per SAN.

■ Sun Microsystems recently launched the Sun Fire X4540 storage server and the Sun Storage J4000 disk array product line. The Sun Fire X4540 can scale up to 48 SATA drives in a single enclosure and runs Solaris OS and Solaris ZFS. The Sun Storage J4000 product line consists of the Sun Storage J4200 system, which supports up to 12 drives per tray and up to 46 SAS/SATA drives; Sun Storage J4400 system, which supports up to four drives per tray, up to six SAS ports, and up to 192 3.5-inch SAS/SATA drives; and Sun Storage J4500, which is a four-rack unit that supports 48 drives per tray, up to four SAS ports, and up to 480 3.5-inch SATA drives. The J4000 line also includes the Sun StorageTek SAS RAID HBA for running host-based RAID on Sun servers. The Sun Fire X4500 storage server family, available by the end of this month, starts at \$22,000. The Sun Storage J4000 family is currently available starting at \$3,000.

■ Zmanda has unveiled Amanda Enterprise, which has extended application support and disaster recovery options for Microsoft Windows databases and applications. With Amanda Enterprise, IT personnel can back up multiple Windows, Linux, Solaris, and Mac OS X clients to one master backup server running on Linux or Solaris. Amanda Enterprise uses Microsoft's VSS (Volume Shadow Copy Service) to improve reliability during hot backups so that IT personnel can back up user files without impacting data access by users and applications. Custom reporting and native Windows restore is also included in Amanda's scheduler and point-and-click restore features.



There are endless ways to cool down. But not all of them make the most sense for you.

When you're in a tight hot spot, the CM12 from MovinCool is your best option. The CM12 is a ceiling-mounted, self-contained packaged air conditioner that has 10,500 Btu/h of cooling and runs off standard 115V, 15 amp electric. At just 15.5 inches tall, the CM12 can fit into tight drop ceiling spaces, making it perfect for small server rooms or anywhere floor space is limited. And since the CM12 is quick and easy to install, you'll save hundreds in labor costs and have more time to play in fountains if you'd like.











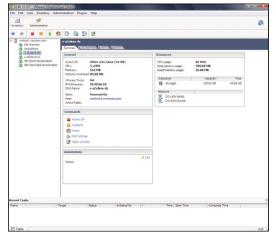
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NETWORKING & VPN

JUNE 13, 2008

Accelerate Applications

Certeon's aCelera Boosts Virtual Efficiency



With the ability to run on any standard x86 system, aCelera Virtual Appliance software can share resources with the rest of your computing infrastructure.

WITH CERTEON'S ACELERA Virtual Appliance software, you can apply the advantages of virtualization to application acceleration without a reduction in application response time. The aCelera Virtual Appliance software delivers up to a 95% reduction in application response time for applications being accessed across the WAN. The software runs on standard x86 hardware in one or more virtual machines, so companies can mix and match application acceleration solutions for virtualized and nonvirtualized environments.

aCelera Virtual Appliances accelerate all network traffic and are optimized to accelerate remote access to specific applications, including Microsoft Office,

Microsoft Office SharePoint Server, EMC Documentum eRoom, and UGS Solid Edge. The Certeon aCelera software provides centralized provisioning and is integrated with VMware Virtual Center to enable IT managers to allocate and manage app performance resources wherever needed. This flexibility helps avoid the need for specialized devices at each end of a WAN connection. By adding more virtual machines, IT staff can increase the acceleration capacity as much as needed for specific times or days when application traffic is heavy.

IT managers can reduce their overheard costs by downloading and deploying the aCelera Virtual Appliance software for remote users to help reduce the amount of dedicated hardware in data centers and remote offices.

Certeon aCelera Virtual Appliance Software

Starts at \$2,495

Allows you to accelerate application access without dedicated hardware

(781) 425-5200

www.certeon.com

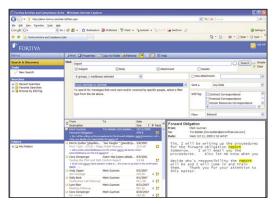


Messaging & Telephony

JUNE 13, 2008

On-Demand Email Archiving

Fortiva Offers An All-Inclusive Email Archiving Solution



The Fortiva Archiving Suite allows you to easily search all archived messages, including attachments, right from Outlook or any web browser

THE MAJORITY OF a company's business-critical data is stored in email; data that can impact revenue, business decisions, corporate reputations, and enduser productivity. With all this at stake, businesses need to ensure that email is securely stored and easily accessed.

Fortiva Archiving Suite gives businesses a secure way to store and access an unlimited amount of historical email in real time without overloading the Exchange server. Fortiva also offers full preparation for legal discovery and provides easy compliance with regulatory rules. The policy-driven system also ensures consistent retention.

Fortiva Archiving Suite automatically captures and indexes all internal and external communications for redundant storage offsite. Users can easily access data within Outlook or a Web browser with guaranteed search performance, resulting in less need to store historical data within the mail server. Fortiva also guarantees data privacy through its DoubleBlind Encryption technology.

As a SaaS solution, Fortiva can be up and running in days, with no up-front capital costs and minimal planning. Fortiva takes care of everything from storage

to security, so the archive can be easily managed by existing messaging staff.

Fortiva Archiving Suite

Starts at \$1.01 per user, per month for 1,000 users

Email archiving system that lets companies manage their storage, comply with federal regulations, and meet eDiscovery requests

(866) 366-3668

www.fortiva.com



We Take Care. You Take Control.



The ABS-Secure Backup System

AES Full Disk Encryption



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NETWORKING & VPN

JUNE 6, 2008

Remotely Deploy Linux & Windows Systems

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			MAC-Spi	cific Provisioning	Roles			
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Nicks		Host Name	IP Address	MAC Address	Role Template	Provisioning	Edit/Copy/Delete	
Asset	Tag_3391	SAP_ERP_6_0_proto	10.2.55.42	00:11:09:2e:b4:06	SLES 10 SP1 SAP	enabled .	34	
Asset,	Tag_3792	R7B19_JBoss_0	10.2.55.202	00:11:19:03:5a:b9	RHEL Sul JBoss	enabled	36	
Asset	Tag_4049	R7823_Oracle_23	10.2.55.209	00:09:b4:c3:00:a0	RHEL 4u4 64 Oracle	disabled		
Asset	Tag_4052	R7823_Oracle_24	10.2.55.210	00:11:7a:b4:29:0a	RHEL 4u4 64 Oracle	disabled	D 70 30	
Asset	Tag_4432	sles_11_Oracle_QA	10.2.55.207	00:11:09:20:2fb3	SLES 11_Beta	enabled	20	
	onitor	ZenossEnt_01	192.168.0.249	00:11:7a:b5:ac:1d	RHEL 5 Zenoss	enabled	20	
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Asset,	Tag_4536 Tag_4209	R7B03W2K3	10.2.55.09	00:11:09:2e:c1:b2	Windows 2003 Server	enabled	30	
Asset,			10.2.55.09	00:11:09:2e:c1:b2 00:04:59:4c:04:1c	Windows 2003 Server Windows 2003 Server	enabled disabled	1 2	

LinMin Bare Metal Provisioning 5.1 lets you perform remote, unattended installs of several OSes.

LINMIN BARE METAL PROVISIONING 5.1 simplifies the unattended deployment of systems and virtual machines on new platforms and adds "green" features and innovative provisioning business rules.

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Install LBMP, upload your Linux and Windows DVDs and CDs, and create system roles such as Novell SLES 10 with SAP or Microsoft Windows Server.

With Fire And Forget Provisioning, you assign system roles to systems with unique network settings, host name, and passwords. Specify the provisioning rule such as Always, Never, Boot To HD (to avoid accidental repurposing), or Provision Only At Next Network Boot, Then Boot To HD (to prepare systems and provision them during the next network boot).

On The Fly Provisioning lets you select the system role from the client's UI or assign a default role for all unknown PXE boot requests.

LBMP also captures and restores entire disk images to help with disaster recovery and to reduce energy consumption by parking power-hungry systems unless needed. Once provisioned by LinMin, systems are turned over to your systems management infrastructure.

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Ethernet Converter

Transition Networks GFEB Series Provides Easy Integration

AS A COMPANY GROWS, the need for flexibility and functionality increases, and so does the need for products that will accompany the growth and change. In the past, some Ethernet converters haven't had enough ports or haven't been costeffective. Transition Networks has set out to solve this problem with the new GFEB series of 10/100/1000 Ethernet converters.

NETWORKING & VPN

GFEB series products provide an easy way for companies to integrate legacy



10/100 UTP devices into a Gigabit Ethernet fiber network. Also, network administrators have new enhanced network management capabilities.

The new GFEB-120 series of 10/100/ 1000Base-T to 1000Base-X Ethernet copper-to-fiber media converters replaces Transition's GFEB-100 series of media converters. With the new product line, customers benefit from new features such as bandwidth allocation, virtual cable test on UTP port, IEEE 802.1q VLAN tagging and double tagging (Q in Q), IEEE 802.1P QoS, IPv4 Tos/DiffServ, IPv6 traffic class, portbased VLAN to allow unidirectional transmission, RMON counters for each port, Digital Diagnostic Monitoring interface, and the ability to remotely update firmware.

These new converters are fully compatible with the previous models and also

features that increase functionality and include those features found on the GFEB-100 series, including AutoCross, AutoNegotiation (both UTP and fiber ports), Link Pass Through, Pause, Automatic Link Restoration, and switch-selectable speeds.

JUNE 6, 2008

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SERVICES JUNE 6, 2008

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Kroll Ontrack Offers IT Media Disposal Programs

PROPERLY DISPOSING OF and recycling hardware is an important component in protecting the environment. Especially when dealing with hardware that contains sensitive data, it can be unclear how individuals and organizations should dispose of and recycle materials in the way that protects the data and is environmentally friendly.

Kroll Ontrack recognizes the importance of implementing green initiatives, so it wants to lend a hand to individuals and organizations that would like to find more ways to reduce their environmental impact. The services the company offers protect both vital data and the environment—a win-win situation.

Kroll Ontrack is offering media erasing services to help individuals and organizations discard end-of-lifecycle hard drives. Ontrack Eraser software uses overwriting methods to permanently remove data. Ontrack Eraser services, which Kroll Ontrack specialists perform, provide comprehensive removal of data. Kroll Ontrack specialists use a degausser, a hardware tool that wipes out data using magnetic fields.

The services dispose of certain media by disassembling the good parts for reuse before discarding the storage media. Kroll Ontrack's recycling vendor takes the other parts of the hard drives and storage devices and divides the leftover material into groups, such as metals, circuit boards, copper wiring, and aluminum. These materials are then recycled and reused for other products. Even the components left over are not dumped into landfills or incinerators. Instead, a combination of physical and mechanical demanufacturing methods are used to split up harmful materials from recyclable parts.

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SECURITY JUNE 6, 2008

A Secure Virtual **Data Container**



QuickVault's JumpVault Gives Mobile Devices **Powerful Security Features**

MOBILE DEVICES are becoming more ubiquitous every day. However, what they gain in convenience they can lose in security. It's common to misplace a mobile device. In either loss or theft, data should be both protected from possible breaches and also able to be disabled remotely.

QuickVault's JumpVault turns nearly any mobile device into a secure, virtual container of information. Size doesn't matter; JumpVault can secure a device with any size internal flash memory. As an added security bonus, the virtual container can be disabled remotely so that the stored data is effectively locked down from any potential breach. Essentially, JumpVault is designed to extend the controlled and secure IT environment to the mobile user.

JumpVault virtual containers are password-protected with built-in 256-bit encryption, remote authentication of devices and users, and meta data logging to keep track of any data movement. When configuring the virtual container, users can include or exclude any files or folders. Supported operating systems include WinXP and Vista, Mac OSes, and Linux. Users can also schedule daily, weekly, or monthly backups and set backup rules. Setup is designed for ease of use and includes drag-and-drop capabilities. JumpVault also automatically compresses files.

QuickVault's servers facilitate a number of functions of JumpVault, including meta data logging and remote data transfer. JumpVault is preconfigured to authenticate with QuickVault's servers, so connection is both simple and secure.

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NETWORKING & VPN JUNE 6, 2008

Keeping Track Of Names, Not Numbers

eTelemetry's Locate 4.1 Gives Administrators Name-Based IP Address Tracking Capabilities

IT CAN BE DIFFICULT to track users on a network when their only identifying mark is an IP address. Locate 4.1, eTelemetry's network appliance for IP mapping, makes it significantly easier by attaching people's names to IP addresses, MAC addresses, and switch ports.



The appliance makes it easier and faster to locate devices, users, and connections and helps administrators react more proactively to network threats.

Keeping track of ports and addresses by name enables network forensic tracking to account for employee network activity. With configurable reports, administrators can detect rogue Wi-Fi networks so they can react in a timely manner.

Locate lets administrators acquire email, instant messaging, and switch port information from unauthorized users and quickly identify and shut them down. An additional feature named Instant Assist can be leveraged by help desk staff to locate a user's network by name and, with a one-click connection, implement Remote Desktop and Remote Assist.

With Locate 4.1, visibility is possible even without a centralized network, and security and identity management features will still benefit a system without a network operating system.

Locate 4.1 works with any wired or wireless network, features plug-and-play installation, and works from a mirrored port to avoid impacting network performance.

Locate 4.1

Provides easy name-based tracking and management of IP addresses on the network

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NETWORKING & VPN STORAGE JUNE 6, 2008

Agentless Information Recovery Management

Televaulting 8.0 Provides A Next-Generation Platform For Information Recovery

IT PERSONNEL certainly have their hands full with the escalating amount of information stored on networks, server consolidation, compliance, security, and disaster recovery issues always looming. Legacy backup and recovery technologies don't always have what it takes to ensure organizations can map IT processes, reduce IT costs, retain data long-term, and maintain business continuity. So, organizations are turning to agentless information recovery management platforms, such as Televaulting 8.0 from Asigra.

In addition to providing agentless information recovery management, Televaulting 8.0 offers backup and recovery of VMware ESXi, and its intelligent archiving feature provides policy-based backup life cycle management and longterm data retention, while cutting the costs of hardware storage. The multidirectional data center replication supplants storage-storage replication and supports one-to-one, many-to-one, and many-to-many replications. Organizations will have room to grow in both capacity and performance with DS-Client grid-based scalability. Also, Televaulting 8.0 supports SAP, SharePoint, Oracle, Microsoft SQL, DB2, Exchange, Lotus Notes, GroupWise, and others.

With Televaulting 8.0, IT outsourcers and organizations get integrated information recovery management from the data center to the remote office, along with potential solutions for performance loss, manual deployment, burdensome software and information management, limited cross-platform interoperability, and security problems. The nonintrusive platform behaves as a data recovery services "blade" in the outsourcer's, providing capital and operational cost reductions and allowing for the removal of software agents that have damaging impacts. As the only 64-bit agentless information recovery management platform, Televaulting 8.0 offers a centralized approach to agentbased patchwork solutions.

Asigra Televaulting 8.0

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Easy Network Monitoring

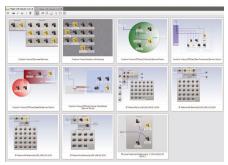
Manage Network Events With AdRem Software's NetCrunch 5

NETWORK MONITORING can be a complicated set of processes. Simple, clear-cut solutions are hard to find, which is why AdRem Software developed NetCrunch 5, a network monitoring solution for SMEs.

NetCrunch 5 boasts the inclusive monitoring of Windows, Linux, NetWare, and SNMP devices. NetCrunch 5 differentiates itself not only by providing such a wide array of monitoring coverage, but also by doing so in an agentless manner.

NetCrunch 5's new features include predefined monitoring policies for major operating systems and applications such as Exchange, SQL Server, Oracle, Insight Manager, IBM Director, and others. NetCrunch 5 is able to monitor an assortment of systems and devices, as it also contains RPC, WMI, SSH, and SNMP monitors and more than 65 builtin network service monitors. A major feature that makes NetCrunch 5 so easy to use is its intuitive user interface. NetCrunch 5 will automatically perform network discovery, a scan of your system that will identify and classify nodes and present them in a graphical map form, making it easier to see where problems occur and making solutions faster and more efficient.

AdRem Software's NetCrunch 5 promises to reduce the cost of IT operations and thus improve company revenue. IT professionals will appreciate lower maintenance requirements and shorter deployment time.



May 30, 2008

NetCrunch 5 presents data in graphical form, making problems easy to identify and faster to correct.

NetCrunch 5 is designed to run on Windows XP SP2, Vista SP1 (excluding Home), and Windows Server 2003 x32 or x64 and comes in two editions: Premium and Premium XE. The Premium XE edition is intended for a dedicated server, as it is optimized for larger, intensely monitored networks. Both editions include a one-year professional service agreement with annual upgrade protection.

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CLIENTS May 30, 2008

Server Power, Laptop Portability

Eurocom's D90xC Phantom-X Mobile Server Provides Powerful Computing On The Go

computing in settings other than a typical office is a large and crucial one. Eurocom

addresses this market with its D90xC Phantom-X Mobile Server, a powerful PC in a laptop form factor that weighs just 12 pounds.

The D90xC Phantom-X is a 64bit system that operates on Intel quad-core Xeon processors running at 2.83GHz with 1,333MHz frontside bus and 12MB of L2 cache. Speed is

THE NEED FOR POWERFUL, server-caliber further facilitated by up to 8GB of DDR2-800 memory.

> Although measuring 11.9 x 15.8 x 2.05 inches (HxWxD), the D90xC Phantom-X supports up to three SATA-300 hard drives for up to 1.5TB of storage. Users can also choose between RAID 0, RAID 1, or RAID 5 configurations.

Other features include a 17-inch display, a one-hour backup battery in the event of a power failure, and a rewriteable Blu-ray drive. The keyboard is a full 102key desktop-type board with a separate numeric keypad. Wireless options include built-in 802.11a/g/n WLAN, as well as

The D90xC Phantom-X also features a number of I/O ports, including a Gigabit Ethernet LAN with an optional second Gigabit Ethernet port via a PC Express slot. The computer also features four USB

2.0 ports, FireWire, serial and parallel ports, and CRT and DVI-D ports to power up to two additional external displays.

The D90xC Servers are customizable, and the hard drives, memory, optical drives, processors, and graphics are upgradeable.

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NETWORKING & VPN

May 30, 2008

PHYSICAL INFASTRUCTURE

May 2, 2008

Audit Your Computer Inventory

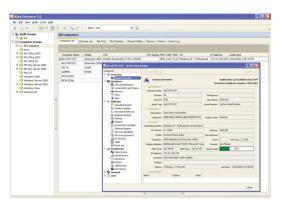
Alloy Discovery Provides All The Necessary Tools

THE INVENTORY of computer hardware and software can be easily overlooked. Alloy Discovery from Alloy Software is a network inventory solution to help SMEs gain tight control over their entire computer inventory through a combination of audit methods that include an agentless on-demand audit, login-script, scheduled task, and the portable audit for non-networked computers.

Alloy Discovery can configure, deploy, and run inventory audits, as well as help analyze the audit

results. For flexible deployment, the software offers multiple configuration options, including single- and multidomain networks; workgroup networks; remote (WAN) sites and isolated networks; and standalone and non-networked computers. Alloy Discovery lets you audit computers on an ongoing basis.

To help maintain an up-to-date inventory, Alloy Discovery includes an automated archive process called "Pruning." This process allows you to define a schedule for the removal of obsolete audit snapshots and determine the file storage path for archived records. The system will then automatically remove obsolete audit snapshots from the Inventory Repository.



With flexible data filtering and grouping, Alloy Discovery lets you sift through data using specific criteria.

The audit results can help you plan for OS migrations and hardware and software updates, and you can integrate the data with other interfacing applications.

Alloy Software Alloy Discovery

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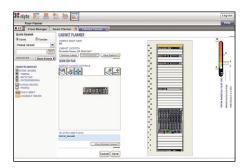
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IT PERSONNEL are facing enormous problems managing a dynamic data center environment. Impacts of implementations, consolidations, virtualization, the retirement of IT assets, and even basic IT changes lead to the risk of overheating, increased power costs, new capital equipment expense, cable infrastructure road blocks, system downtime, and security risks that result in increased operational cost.

The nlyte software suite from GDCM (Global DataCenter Management) optimizes critical data center physical assets by visualizing, modeling, and enabling immediate feedback on planned and implemented changes to facilities, equipment assets, racks, devices, cables, connections, and power resources. The software lets users trend and analyze how current and planned changes impact

redundancy, power, cooling, space, network, and cable capacity.

nlyte solves complex problems related to managing physical capacity, allowing the delay of capital expenses, and reducing operational costs related to power, space, and human capital. Companies using nlyte today are gaining the ability to model the data center, establish unified procedures and processes, integrate multiple systems, understand IT changes prior to implementation, and predict how power and cooling supply and demand will effect their entire global data center fabric.

Global DataCenter Management provides enterprise software products to support strategic planning and operation of some of the largest data centers in the world. The company, founded in 2003 and headquartered in California and London, England, is uniquely positioned to provide automation and analytic expertise, focusing on the physical infrastructure needs of medium to extremely large data center environments.

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Disaster Recovery Testing In Your SME

What Needs To Be Done & When

by Bruce Gain

A NEARBY RIVER FLOODS its banks, and within a few hours, the enterprise's campus is submerged in knee-deep water. Everyone safely leaves the premises, but the technology-driven company's employees scatter with few instructions about where to go and what to do. Most of the accounting and billing department's employees are nowhere to be found, while the call center staff has been told to go home, where they are unable to work. The

thousands of dollars per minute. If the firm is not up and running in two weeks, it will likely never recover. But this is not what was supposed to happen; just one month ago, the company's head of operations signed off on the CTO's disaster recovery plan, which offered a detailed outline showing how the firm could begin to function again if the enterprise's infrastructure were destroyed.

One of the key elements was a replica data center that existed offsite, with all of the applications up and running in a matter of minutes following a mass outage. Access is available to anyone online with the login and password information. The problem: Nobody, besides a few peowith a disaster recovery plan in place, it's a safe bet that most fail to regularly test the plan as much as they should to make sure it would work in time of disaster. The issue is simple: Even the most stellar plan is not worth much if it is not regularly tested.

"You don't want to learn the ropes when it's an emergency," says John Matzek, cochief executive officer of Logic IT Consulting (www.logicitc.com). "It is only after testing that you can then properly set expectations for how long it will take to get services running."

Downtime Metrics

A key metric involved in recovering from a disaster is the RTO (recovery time objective), which gauges the amount of time it takes for a data center or department to be up and running in the case of a cataclysmic event. The RTO will vary from department to department, depending on its importance, and the metric should serve as a key benchmark during the testing process, says Adam Waxman, vice president of client services at ROBObak (www.robobak.com). "A call center, for example, should have priority over accounting, and the RTO for the call center might be two to four hours," Waxman says.

While using the RTO as a standard of measure, the enterprise should conduct tests frequently and view them as a learning process each time, Waxman says. He recommends testing once per quarter.

Bare-Bones Testing

Disaster recovery does not necessarily only involve getting data centers up and running after they have been subjected to earthquakes, floods, and hurricanes. Bad things can happen on a much more basic level, as well, such as when a power supply goes down and the server rack must run on the alternative feed. An important disaster recovery test, which SMEs often overlook, involves the power and cabling infrastructure backup systems.

"Most [data center managers] don't realize that they have not set up, cabled, and installed everything properly until there is a problem and the whole cabinet goes down," says Calvin Nicholson, director of product marketing for Server Technology (800/835-1515; www.servertech.com).

An important test involves the alternative A and B power in-feeds to a cabinet. Both feeds must be able to individually power the cabinet so that if one of the feeds goes down, then the other can support the full load of the server, Nicholson says. Each feed should thus be routinely tested to make sure it can handle the other feed's power load in the event of a power feed failure.

After each test, a review should look at how the SME can improve the process. "The testing process is about making mistakes and learning from those mistakes," Waxman says. "A lot of people get scared about tests. But you really need to find where the gaps are because that is why you practice."

Waxman, who has worked with many businesses that have developed data Go to Page 24

For those enterprises with a disaster recovery plan in place, it's a safe bet that most fail to regularly test the plan as much as they should to make sure it would work in a disaster.

head of the sales and marketing department instructs her staff to work from home, but most are unequipped to do so. And worst of all, over 90% of the firm's employees have no idea where and how to access the data and applications to get their jobs done.

Meanwhile, the cost of the downtime is rising exponentially, measured in

ple, knows about the disaster recovery plan, much less how to log on to the replicate network.

The scenario unfortunately paints a picture of what would likely happen in many enterprises in the case of a real disaster. Enterprises that are grossly negligent and have no disaster recovery plan in place are increasingly rare. But for those

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Improving Web Security

A Look At Common Threats & New Defenses To Stop Them

 $by\ John\ Brandon$

LOCKED-DOWN NETWORKS, airtight VPNs for remote workers, impenetrable firewalls, a virus-blocking system that's second to none: These are the hallmarks of a good security strategy. Yet, even when an industrious IT manager covers all the security bases, there is one pesky problem: Users within any organization can fall prey to a Web attack, typically one that bypasses a firewall, worms its way onto file servers, and can even attack an SQL database and self-replicate. It's the human factor involved in a Web attack that can give data center managers the most headaches. Most traditional Web security tools use signature files (a list of known spyware and virus distribution sites) to block attacks, but there is room for improvement on these traditional, and in some cases untenable, approaches.

New Deceptive Attacks

One constant in the world of Internet security is that there is always a new attack

Latest Security Threats

- New phishing scams change domain name servers for the actual company site and capture login details.
- Low-level rootkit threats hide below the Windows Registry and then add malware clients when protection is disabled.
- SQL injections add code to SQL tables that can capture company information when a user accesses the database.
- Cross-site scripting, a way for one company Web site to send data to another, is often insecure; hackers can add code to the transfer.

on the horizon. The hacking communities, many of them based in foreign countries, are now seeking credit card information and business secrets from small companies that might not have the industrial-strength protection of a larger enterprise.

"We have researched why hackers are able to bypass the existing layers of security such as firewalls and virus scanners, and the answer was that computers are often these third-party applications. Malware on the Web does not care about which users they attack; they take whatever they get. You can't set up your level of security relative to your company size."

Mark Beckett, a vice president at Secure-64 (www.secure64.com), says another common attack involves DNS hijacking, where the hacker penetrates a Web server enough to change the DNS registrar listing and points the site to another server. This attack is more devious than a phishing scam, which tries to point users to a bogus site with a slightly altered domain name. Instead, the domain and content look exactly the same as the original site. Hackers can easily steal usernames and passwords and other data.

Web 2.0 has spawned a whole new range of Web attacks that exploit cross-site scripting, where one site exchanges information with another; mash-ups that use data hosted on a secondary site—for example, an interactive map in Google that pulls data from bus routers; and sites

react with a new defensive strategy. For example, Secure64 is working on a tool that uses DNSSEC, which warns users that a site is not hosted properly. A product from Websense (www.websense.com) analyzes all content on a Web 2.0 site and allows end users to block certain insecure portions.

Check Point has a new security product that uses virtualization on the client's PC to fool malware and virus attacks. On the local machine, it replicates Internet ports, the Windows Registry, and file structures. When an attack breaks through a firewall or other defenses, it only infects the virtualized system files. The tool examines and constantly protects the actual file structures and Registry and prevents infection, and it will quarantine suspicious code.

Another recent technique for battling Web threats has to do with "the cloud" (computing that takes place on the Internet rather than inside a company firewall) and protecting an SME before malicious code even appears on a browser. Trend Micro (www.trendmicro.com) has developed cloud computing software than runs as a hosted service and examines traffic in the cloud, an effective measure that does not slow bandwidth.

"The biggest things to have come about in the recent years are reputation services," says Jamz Yaneza, threat research project manager at Trend Micro. "This has come to email as SenderID and DomainKeys, to the network as NAC, [and] in the cloud as Web and IP managed services. The challenge right now is to stay in the background and inspect traffic without compromising throughput traffic. Many solutions in combination with desktop clients up to the gateway are in the works today, and these new technologies should be implemented as soon as they become available."

In the end, the job of IT is to track not only new emerging threats but to respond with new tools that block these threats as quickly as possible. Older tools can continue to protect key systems, and the new tools fight the latest threats, adding up to a comprehensive solution.

It's the human factor involved in a Web attack that can give data center managers the most headaches.

attacked through the browser," says Jordy Berson, group product manager at Check Point (www.checkpoint.com), a company that makes Internet security products.

The latest threats tend to find weaknesses in the code corporate Web sites use, according to Christoph Alme, who leads the anti-malware lab for Secure Computing (www.securecomputing.com) in Germany. For example, an SQL injection is an exploit that finds compromises in database code on a Web server and attaches a malware program that turns the local client into a malware host. Another trick is to use a Flashbased banner to distribute malware. The hacker uses legitimate ad networks and Web sites, but once you click the banner, you are taken to a malware site, and the local PC becomes infected.

"As Microsoft products have become more secure, attackers have been targeting vulnerabilities in Flash, QuickTime, Real-Player, or Acrobat Reader for PDF viewing," says Alme. "The problem here is that users may not be aware of exactly which third-party software is installed on their desktop computer and may not know how to update these. The attacks against legitimate Web sites also use exploits against

built using tools and APIs that are not inherently secure, such as Java applets that use open-source code. Many Web 2.0 sites are not built to be secure because they are not intended for corporate users or provide a function that itself does not need to be secure, such as keeping track of your schedule, yet a hacker can compromise them and use them to distribute malicious code. Corporate users try these simple Web 2.0 sites with good intentions, but their PCs can be infected, and corporate data can be compromised without their knowledge.

New Scams, New Defenses

As attackers develop new Internet scams, security software companies often

Four Protection Schemes

Mark Miller, the Microsoft Trustworthy Computing product manager (www.microsoft.com), says SMEs should use four main protection schemes against Web attacks. The first is to install company-wide spyware and virus prevention software. Second, install a comprehensive

backup system. Third, he says, a hardware firewall is critical, and it must be updated and used on every computer. Last, he says, patching all applications and security systems regularly will help prevent a hacker from compromising company data.

Disaster Recovery Testing In Your SME

Continued from Page 23

recovery plans, says many SMEs worry too much about getting an alternative site or replica data center up and running and then end their plans there. "A lot of people are not planning for the day when they go back to the original data center," Waxman says. "But you are supposed to eventually transition back to your original environment or to completely rebuild the

original environment, and you must test through that."

A Group Effort

Disaster recovery testing is one area that absolutely must involve departments outside of IT, yet enterprises all too often do not heed its importance. A good example of how businesses are generally apathetic about testing is fire drills. "We learned

about fire drills in elementary school, but now we have forgotten about it," Waxman says. "Now when the alarm goes off, we close our doors and say, 'I don't have to go downstairs.' That's really what goes on."

It is thus necessary to educate upper management about the importance of testing and what they stand to lose if they do

them than local access, then they know how to do that and use remote access."

Risk Assessment

Testing needs to be comprehensive and particularly adapted to where the data center and enterprise are located. On a macro scale, the SME needs to consider environmental

Updating Your Disaster Recovery Plan

How often should a small to midsized enterprise update its disaster recovery plan? The answer is simple: every time it does a disaster recovery test. Each test should be a learning process indicating where the plan falls short, so the updated

plan thus needs to rectify what went wrong during the test. A general rule of thumb is that enterprises should test their disaster recovery plans quarterly, so the backup plan should be updated accordingly, says Adam Waxman, vice president of client services at ROBObak (www.robobak.com).

"Businesses and their needs constantly change, so companies need to update their disaster recovery plans to reflect those changes," Waxman says.

Disaster recovery testing is one area that must involve departments outside of IT, yet enterprises all too often do not heed its importance.

not heed your warning. Then, tests should ensure that all users have connectivity for applications that are crucial to the different business areas, says Michael Croy, director of business continuity for Forsythe Technology (www.forsythe.com).

"To verify connectivity, one should have a business person sitting there at that remote keyboard to make sure they can hit that ENTER key and that they are satisfied with the connectivity and the accessibility to the data that they are looking for," Croy says. "They can also utilize that testing time so that if remote access is different for factors. A location near a river, for example, should involve disaster recovery tests in the event of a flood, while a firm in California might be more prone to earthquake risks and will thus require different testing scenarios.

"One way to do this is to look at the different crises that can befall a company," Croy notes. "You can have a security lapse, where you have a breach and a virus brings your system to a halt . . . while on the other hand, businesses in the flood plains of Iowa and Missouri have [recently] lost their data centers. It could also be power failures or whatever."

Supporting Remote Workers

Some Basic Technologies & Policies Allow Most Businesses To Embrace Telework

by Kurt Marko

WHILE COMPANIES HAVE long tolerated informal, part-time telecommuting, many are now looking at allowing employees to trade the cubicle farm for a home office. Yet embracing full-time telework requires careful planning of technology infrastructure, HR policies, and IT support processes to ensure a successful implementation.

Infrastructure Basics: Networking

The man who coined the term "telework," Jack Nilles, co-founder of JALA International, contends that "a substantial amount of telework can be accomplished effectively with only a telephone, paper, and pencil as the relevant technologies"; however, given today's reliance on email, the Web, and networked applications, any realistic telework scenario relies on broadband Internet access. Broadband connectivity, VPNs, a PC, and appropriate security software on that PC are the four pillars of telework infrastructure, according to Candice Low, research analyst at Info-Tech.

DSL and data over cable are the most common and widely available broadband technologies in the United States, with roughly equivalent market share, while fiber to the home and satellite access remain niche offerings. Highly mobile employees may need high-speed wireless data service (3G); however, it's significantly more expensive and often crippled with low monthly download limits

Because there's no single, universal broadband technology, any telework program needs to accommodate several alternatives; unfortunately, this can be a logistical and administrative nightmare for firms with hundreds or thousands of employees spread across the country. In these situations, it makes sense to consider a network aggregator to serve as the middleman between IT and the myriad local broadband carriers, says Piero DePaoli, director of product marketing at iPass (www.ipass.com).

Once employees have a high-speed data connection, they need a safe means of accessing internal company applications and data. The standard technology for establishing secure network connections is VPN. Low says, "In the past, IPSec and PPTP VPNs were the best teleworking options; however, SSL VPN is being increasingly adopted since it provides the best security and the easiest administration of all the VPN solutions."

An added advantage of SSL is that it's clientless, obviating the need for special

software on the host PC because a simple browser connection can initiate a VPN session. VPNs, which encrypt all data between the client PC and a company's VPN gateway, support a variety of user authentication schemes, from simple usernames and passwords to more secure hardware tokens or one-time password devices.

PCs, Software & Policies

Nilles' contention aside, the PC has replaced paper and pencil, with companies increasingly opting for notebooks due to their mobility and energy efficiency. According to DePaoli, most businesses supply full-time teleworkers with systems equivalent to their office colleagues'. Given standardization and price competition among PC vendors, the bigger decision companies face isn't what hardware to buy but rather which PCs teleworkers are allowed to use.

"A major teleworking decision is whether or not teleworkers should be permitted to work from their personal computers or issued a company machine," says Low. "While it is appealing to have employees use their own equipment, it can result in problems such as higher IT support costs and security issues" because these machines are outside of IT's control.

Provisioning voice service for teleworkers is one area where companies perhaps suffer from an abundance of riches. For employees who don't live on the phone, Low suggests considering so-called "soft phones," essentially a PC VoIP application such as Skype or Google Talk, and a USB headset. Jobs entailing extended phone use, such as call center agents, should consider a standalone hardware VoIP phone, says DePaoli, adding that mobile teleworkers can often leverage a wireless phone for use both on the road and at home.

Anti-malware, firewall, and data encryption software is de rigueur for remote PCs, just like their office-bound counterparts. However, because they present greater risk of data loss or theft, Low notes, "Laptop encryption is especially important to protect sensitive data."

Businesses planning to implement a full-time teleworking program need to establish eligibility guidelines, usage policies, and expense controls, says Low, adding that the key is to set up policies in advance so that employees have a clear understanding of how the program works and company expectations of teleworkers. Aside from providing clear and transparent criteria for who can work remotely, these policies need to outline expenses the company covers, set

expectations on work hours and employee availability, and outline IT support processes for teleworkers (see the "Sample Teleworking Policies" sidebar for details).

IT Support & Help Desk

Help desks play a critical role, but Low cautions that they will see a spike in calls during the initial rollout. She says that "without proper planning and infrastructure in place, the help desk can quickly become overwhelmed." Low suggests developing online documentation and self-help tools to minimize support calls; deploying remote PC diagnostic tools; and implementing a dedicated phone contact or hotline for teleworkers. Low also advises help desks to consider extending support hours to accommodate remote workers who live in alternate time zones or work nontraditional hours.

The costs of commuting and environmental sensitivity have spurred employers to reconsider telework. The technology and policy groundwork for a telework program need not imply a long and complex undertaking.

Sample Teleworking Policies

Instituting a formal program allowing remote workers entails addressing a number of personnel, financial, and process issues. This table outlines the range of policies companies need to develop before implementing a telework program.

Policy	Typical Parameters				
Scope Of Program	Boilerplate outlining whom the policies apply to (typically all managers, supervisors, and their teleworkers)				
Eligibility	 Outline what criteria are used to select who can work remotely These often include: Overall job performance as documented in performance reviews Degree of self-motivation Degree of organizational, prioritization, and time-management skills Ability to work independently in an unsupervised environment Disciplinary record from the past, especially in the areas of reliability, punctuality, and attendance 				
Application Process	 Procedures for becoming a teleworker. These need to be fair and transparent because many employees will see teleworking as a benefit; thus, those who don't get accepted for the program need to understand why not and feel they've been treated fairly. 				
Hours & Availability	 For full-time teleworkers, outline the expected working hours, whether fixed or flexible, and the schedule For part-time or occasional teleworkers, list the circumstances under which teleworking/working from home is allowed Contact procedures (email, phone, IM) and expectations on response times 				
Work Space Requirements	 Expectations on home office space, such as whether a dedicated room is required Policies for supervisory inspection of home office Guidelines on office layout, suggested furniture, ergonomic considerations, etc. 				
Equipment/Software/ Services	 Describe what equipment is company-provided (typically the PC) and/or paid for and what the employee is expected to provide (perhaps part of the broadband service) Outline reimbursement processes for employee-paid expenses Describe usage polices for company-owned equipment 				
Support Processes & Training	Outline methods for accessing help desk support Describe training requirements and online self-help resources				
Performance Metrics	Standards and procedures for handling underperformance				
Liability	Legal boilerplate disclaiming liability for accidents that occur in the secondary workspace during scheduled work hours while the employee is performing work tasks				



SIX QUICK TIPS

Better Storage Management

Make The Most Of What You Have

by David Geer

BETTER STORAGE management is about better use of existing storage. With the right techniques, SMEs can reclaim or reserve existing storage, replicate and restore data fast, and run applications without disruption.

Advanced Architectures

While RAID architectures are good for small disk storage, according to Geoff Stedman, senior vice president of products and marketing for Omneon (www.omneon .com), large disks are another matter.

If an SME loses one disk in a RAID array, it can still access the rest of the data while the disk is rebuilding. But because drive storage capacity has increased at a faster rate than have processor speed and performance, it takes many hours for today's processors to facilitate a very large drive rebuild in a busy storage system, according to Stedman. He says, "This creates a vulnerability because a second drive failure during that rebuild process could mean a loss of data."

If this vulnerability is a concern, you should consider newer storage systems that replace RAID and offer faster drive recovery times, as well as increased bandwidth to the remaining disks and data stores, according to Stedman. One such system, for example, offers data redundancy by splitting up the data into slices among nodes on a grid. With this type of system, losing one large disk for a period of time doesn't threaten the data, and the grid architecture can replicate it from the failed disk more quickly than RAID can rebuild a drive.

cached image of the storage volume, Yoshida explains. There are caches of the old virtual storage volume and of the new, migrated virtual storage volume, and the platform writes data from the application to both images so that both the migrated data and the old volume are accurate and available for the application.

Whereas software-based data migration interrupts data reads and writes, slowing the application and costing the enterprise time and money, this hardware process copies data without any effect on the application, according to Yoshida.

Save Storage Space With Thin Provisioning

A virtual hardware platform can also help save storage space. To illustrate, an enterprise may ask its storage provider for

One best practice for reclaiming storage is good end-to-end communication between your application teams and your storage owners so that the storage team gets a better sense of storage forecasts and systems rotations.

The network shares the bandwidth requirements for data recovery, avoiding bottlenecks, which speeds the replication process, Stedman notes.

Virtualize For Nondisruptive Data Migration

A virtual hardware platform enables data migration into storage without disrupting the application that is using the data, according to Hu Yoshida, chief technology officer at Hitachi Data Systems (www.hds.com).

In a virtual hardware platform, the application reads and writes data to and from a

10TB of storage space when the immediate need is only for 1TB, explains Yoshida. The enterprise then saves its original data on that storage and makes copies of that original data to work from, which takes up still more storage. The enterprise often copies all the unused space from that 10TB of storage onto these data snapshots, as well, says Yoshida, which wastes additional space.

In order to avoid unused space and copies of unused space, then, enterprises should use thin provisioning. With thin provisioning, that enterprise would request 10TB of data storage from the provider. But, when they start to use it, they only get the actual amount of storage space that they write data to. That way, when they make a copy of the data to work on, they only copy the data that actually exists, not the whole 10TB, so the copy is smaller, using less storage.

Reclaim Storage

Enterprises should reclaim unused storage and return it to the free pool of available storage, according to Ashish Nadkarni, consultant for GlassHouse Technologies (www.glasshouse.com).

Best practices for reclaiming storage include investing in good resource management software to manage hosts, according to Nadkarni. Many people choose not to run the host agents provided with this

Most Versatile Tip:

Use SANs With Varying Array Types

For those who want to get more out of RAID, SANs make it possible. With a SAN, enterprises can easily specify multiple RAID array configurations on a single device. "The fewer devices to manage, the less the administration and associated costs," says Chance Ervin, senior systems engineer at InteleNet Communications (www.intelenet.net).

For applications that require fast I/O, for example, enterprises can create a RAID 10 array on a single SAN device, illustrates Ervin, which is inherently faster than RAID 50. With the flexibility of SAN and RAID, the administrator can specify another area on the same disk for RAID 50 applications such as large space file servers.

Best Time Saver:

Back Up Wisely

Administrators save time and backup tape by avoiding duplication and backing up only data that they would need to recover, says Ervin. In the case of Web servers, this would include the unique Web content on each server. The servers themselves, which are mostly identical, would not all need backups.

If, for example, each server among several has its own copy of the same executable file, then through deduplication, that file is only backed up one time because the files are exactly the same. The same thing would apply to all duplicate files. "In this scenario, there could be a 90% gain in backup windows and substantial cost benefit in using less tape and disk," says Ervin. Backup windows are a measure of the time it takes to back up data, so this equals a time savings.

software, but these host agents provide valuable information for the storage administrator. With them, the administrator can see underutilized drive partitions and reclaim them.

Another best practice for reclaiming storage is good end-to-end communication between your application teams and your storage owners so that the storage team gets a better sense of storage forecasts and systems rotations from the other teams, according to Nadkarni. You should know the systems rotations—when a server or set of servers is being retired or decommissioned—so you can reclaim the associated storage, Nadkarni emphasizes.

BONUS TIPS

Try tiered storage.

Because not all data requires the most expensive kinds of storage, enterprises should take advantage of tiered storage. The data that is most recent, most important, and most often accessed should be stored on tier one storage, according to Scott Delandy, senior product manager at EMC (www .emc.com). Tier one storage assures high availability

and protection for high-value data. Tier two storage is less expensive and more useful as the value of data decreases over time, Delandy explains.

■ Consider active archives.

Small to medium-sized enterprises that use tiered storage may also want to consider taking advantage of active archives. An active archive is useful where data has been

archived and yet must remain available for fast access, according to Delandy. A few examples of this kind of data include billing statements, X-rays, and legal documents. Though the data is still active, because it is archived, it doesn't change and requires only infrequent backups, which is a good reason for moving it to its own tier or storage type.







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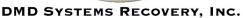
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WHAT'S HAPPENING

Too Much Information, Not Enough Time

Q1 Labs Specializes In Network Security Management

by Julie Sartain

MOST ENTERPRISES have the same problem with their networks: too much information to review and not enough time to analyze it, so they miss threats and have a difficult time proving policy compliance. One solution is an all-in-one tool that provides network behavior analysis, log management, and security information and event management in a single platform.

"All customers have a huge amount of information within their network that is latent but lost," says Tom Turner, vice president of product management and marketing at Q1 Labs (www.q1labs.com). "The sheer amount of this information is a problem in and of itself, before you even try to analyze it for the nuggets of intelligence that point toward security issues or policy/compliance violations."

Q1 Labs was founded in 2001 in the province of New Brunswick, Canada. In a university environment, Q1 Labs initially conceived its product, QRadar, to provide visibility and detection capabilities across large networks by collecting, storing, and analyzing surveillance data from the infrastructure, notes Turner. The first surveillance data set or telemetry was NetFlow for switching and routing products.

Over time, the company has built additional integrations into QRadar to collect security events, logs from hosts and applications, and vulnerability and identity information, adds Turner. The increased breadth of surveillance data and the resulting analysis within QRadar is driven by the company's strategic principle—that is, complete network and security

knowledge delivered simply for any customer.

Research & Development

QRadar was born out of necessity, says Turner. The original product was designed to provide network-wide visibility and analysis capabilities across networks that are not easy to control. Soon the product matured and the customer base transitioned from a single university to other enterprises and verticals where the customer problems that QRadar had to solve were relatively the same: too much information, not enough time.

For example, notes Turner, one Q1 Labs customer currently collects more than 300 million event messages from its infrastructure each day. This customer suspected that 90% of these events were probably noise, but until it implemented QRadar, there was no way to automate the event analysis to prove the team's suspicions. More importantly, the company's prioritization was to elevate the 10% of legitimate issues that it should deal with immediately.

"The challenges for our R&D team have changed over time," says Turner. "At first, we focused on collection, storage, analysis, and presentation of one set of telemetry—network flow data. The challenge was building an information collection and processing pipeline that optimized storage capability, speed of analysis, and ability to represent data."

As other sources of telemetry were added, such as security events, host logs, and user identity information, the challenges became less about the information processing pipeline (which was already in place) and more about the correlation of the

many different types of data in order to produce a more intelligent data stream.

Tackling Challenges

One of the unique concepts the engineering team developed as it thought about how to marry all of these different sets of surveillance data was to try to mimic the judicial system. "Nobody had successfully melded network and security data together from [a] monitoring standpoint before, so the team took the approach that all infor-



mation collected was evidence and, as such, should be judged in a similar fashion," says Turner.

For example, event and flow logs are the "evidence" collected from the many different devices, or "witnesses." Once witnesses have presented the evidence, it becomes the judiciary or magistrate's responsibility to judge the relative severity, credibility, and relevance of that information. "The nice thing about collected network and security data is that both surveillance sets are context for each other; they help prove or disprove whether the information reported is, in fact, true or important," Turner notes.

According to Turner, the resulting analysis solution that sits at the heart of QRadar is known as the Magistrate, and the processing that it performs on all the information that QRadar can monitor is also known as the Judicial System Logic. Essentially, QRadar is uniquely using all these different sets of data (network behavior, security events, host logs, vulnerability data, and user identity information) to prioritize threats according

to how credible they are, how severe they are, and how relevant they are in terms of day-to-day business on that network.

The R&D team had to develop a processing pipeline that began testing for context the second any event entered the product, adds Turner. At the same time, a unique taxonomy of event information had to be created and, more importantly, maintained over time, so all the data QRadar processed, regardless of product type or manufacturing vendor, would be subjected to the same analysis; thus, all data could be judged in the same way.

CTO William "Sandy" Bird recognized early on that an off-the-shelf SQL database would not be an adequate data store for all the information the company was trying to collect, analyze, and present. It was just too much information.

Bird had years of experience as a database administrator and quickly realized that the only data repository that could handle the high-speed insertion and retrieval of this amount of information was something built explicitly for the job.

Thus began the R&D mission of developing a highly indexed, self-maintaining data store to meet the task. "To this day, the database built by this engineering team is a crucial part of QRadar's 'special sauce," says Turner.

Future Plans

QRadar usually has a major release or update every six to eight months, which means a new version is scheduled for release in the fourth quarter of this year. As for the company, it had a record year last year and has similar plans and expectations for this year. Q1 Labs is still growing; it recently branched out to the EMEA (Europe, the Middle East, and Africa) and Asia Pacific regions, opening offices in London and Tokyo.

"While the public markets are tough at this point in time, we have every intention of driving towards an IPO (initial public offering)," says Turner. "The customer problem is big enough, the validation we've had from customers and OEMs proves the technology, and there has already been an IPO for a security monitoring and management company in 2008, so the markets can support it."

THREE QUESTIONS

Network Management & Monitoring For All

AdRem Software Lets IT Graphically Show Infrastructure & Address Problems In Real Time

by Leon Woodward

ADREM SOFTWARE IS headquartered in New York City and is led by CEO and Owner Tomasz Kunicki. The company is a supplier of network management and monitoring solutions for small to large enterprises. When AdRem (www.adrem soft.com) started, it realized that there was global demand in the network management arena for companies of all sizes to manage their mixed environments. AdRem boasts more than 50,000 clients in 50 different countries. The company has a partners program that allows it to expand its reach across the globe and get a share of the multibillon-dollar network and systems management market.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

According to Kunicki, "One of the crucial problems that the enterprises are facing today is reliable access to services hosted from multiple locations. Business continuity and convergence will probably be staying on top of the IT priorities list for a while."

He adds, "Increasing complexity of hardware and software and lack of appropriate human resources may lead to significant network management problems, especially in small and midsized enterprises. From this point of view, network management software needs to be more than just a tool signaling an issue; it has to identify the source of the problem and suggest a solution."

■ What should *Processor* readers know about your company's products?

"We make products for engineers with engineers, but we are software architects. We are not focusing on the technology but on finding the best solutions to specific problems," Kunicki notes. "Users don't need to be aware of the complexity of the technology and the performed operations, so we try to keep them behind the scenes to make the interface clear and simple as much as possible."

AdRem's product line includes its flagship product NetCrunch, which allows organizations to realize benefits such as reduced operations costs, IT business strategy alignment, and an immediate return on investment. "NetCrunch supports the monitoring of SNMP, Windows, Linux, and legacy NetWare systems, and we are constantly working on expanding the supported systems list," says Kunicki. "We want to deliver the most comprehensive monitoring interface on the market."

AdRem's Server Manager 6 allows for the management of Novell NetWare and OES (Open

Enterprise Server)/Linux servers. sfConsole 2007 and Litecon 2008 both allow secure centralized management of NetWare servers. AdRem's network tools include iTools 2007, which combines a set of tools that network professionals use to administer their networks, and SNMP Manager, which gives network administrators both a graphical view and the ability to manage SNMP-enabled devices on their networks.

■ What makes your company unique?

"AdRem Software operates internationally and offers solutions to various markets. From the very beginning, despite the company's size, we were always thinking globally," says Kunicki. "Our software was designed to be flexible and support multiple platforms from the start. While most competitive solutions are Microsoft-centric, we deliver solutions that support various technologies and help to overcome technical inconsistencies between them."

Kunicki continues, "We acknowledge the fact that today's networks are heterogeneous, and we deliver software to manage them the way they are: in constant transition [with] migration from one platform to another with frequent component additions and new technologies deployed on a regular basis."

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AOC-UTG-i2	Intel 82598	UIO Full Height	PCI-e x8	2	CX4	\$335.00
AOC-UG-i4	Intel 82571EB	UIO Full Height	PCI-e x8	4	RJ45	\$193.00



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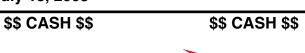
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